

FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 3 OF 5



LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT, KENTUCKY (ALL JURISDICTIONS)

COMMUNITY NAME	COMMUNITY NUMBER
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT, KENTUCKY	210067



FEMA

EFFECTIVE: PRELIMINARY 2/26/2016

FLOOD INSURANCE STUDY NUMBER
210067V003C

Version Number 2.3.3.2

TABLE OF CONTENTS

Volume 1

	<u>Page</u>
SECTION 1.0 – INTRODUCTION	1
1.1 The National Flood Insurance Program	1
1.2 Purpose of this Flood Insurance Study Report	2
1.3 Jurisdictions Included in the Flood Insurance Study Project	2
1.4 Considerations for using this Flood Insurance Study Report	4
 SECTION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS	 14
2.1 Floodplain Boundaries	14
2.2 Floodways	14
2.3 Base Flood Elevations	38
2.4 Non-Encroachment Zones	38
2.5 Coastal Flood Hazard Areas	38
2.5.1 Water Elevations and the Effects of Waves	38
2.5.2 Floodplain Boundaries and BFEs for Coastal Areas	39
2.5.3 Coastal High Hazard Areas	39
2.5.4 Limit of Moderate Wave Action	39
 SECTION 3.0 – INSURANCE APPLICATIONS	 39
3.1 National Flood Insurance Program Insurance Zones	39
3.2 Coastal Barrier Resources System	39
 SECTION 4.0 – AREA STUDIED	 40
4.1 Basin Description	40
4.2 Principal Flood Problems	40
4.3 Non-Levee Flood Protection Measures	40
4.4 Levees	41
 SECTION 5.0 – ENGINEERING METHODS	 42
5.1 Hydrologic Analyses	42

Figures

	<u>Page</u>
Figure 1: FIRM Panel Index	6
Figure 2: FIRM Notes to Users	7
Figure 3: Map Legend for FIRM	10
Figure 4: Floodway Schematic	16
Figure 5: Wave Runup Transect Schematic	38
Figure 6: Coastal Transect Schematic	39

TABLE OF CONTENTS

Volume 1 (continued)

Tables

	<u>Page</u>
Table 1: Listing of NFIP Jurisdictions	3
Table 2: Flooding Sources Included in this FIS Report	17
Table 3: Flood Zone Designations by Community	39
Table 4: Coastal Barrier Resources System Information	40
Table 5: Basin Characteristics	40
Table 6: Principal Flood Problems	40
Table 7: Historic Flooding Elevations	40
Table 8: Non-Levee Flood Protection Measures	41
Table 9: Levees	41
Table 10: Summary of Discharges	43

TABLE OF CONTENTS

Volume 2

	<u>Page</u>
5.2 Hydraulic Analyses	118
5.3 Coastal Analyses	141
5.3.1 Total Stillwater Elevations	141
5.3.2 Waves	142
5.3.3 Coastal Erosion	142
5.3.4 Wave Hazard Analyses	142
5.4 Alluvial Fan Analyses	142
 SECTION 6.0 – MAPPING METHODS	 142
6.1 Vertical and Horizontal Control	142
6.2 Base Map	143
6.3 Floodplain and Floodway Delineation	144

Figures

	<u>Page</u>
Figure 7: Frequency Discharge-Drainage Area Curves	117
Figure 8: 1% Annual Chance Total Stillwater Elevations for Coastal Areas	141
Figure 9: Transect Location Map	142

Tables

	<u>Page</u>
Table 10: Summary of Discharges	93
Table 11: Summary of Non-Coastal Stillwater Elevations	117
Table 12: Stream Gage Information used to Determine Discharges	118
Table 13: Summary of Hydrologic and Hydraulic Analyses	119
Table 14: Roughness Coefficients	141
Table 15: Summary of Coastal Analyses	141
Table 16: Tide Gage Analysis Specifics	141
Table 17: Coastal Transect Parameters	142

TABLE OF CONTENTS

Volume 2 (continued)

Tables

	<u>Page</u>
Table 18: Summary of Alluvial Fan Analyses	142
Table 19: Results of Alluvial Fan Analyses	142
Table 20: Countywide Vertical Datum Conversion	143
Table 21: Stream-by-Stream Vertical Datum Conversion	143
Table 22: Base Map Sources	143
Table 23: Summary of Topographic Elevation Data used in Mapping	144
Table 24: Floodway Data	145

TABLE OF CONTENTS

Volume 3

	<u>Page</u>
6.4 Coastal Flood Hazard Mapping	192
6.5 FIRM Revisions	192
6.5.1 Letters of Map Amendment	192
6.5.2 Letters of Map Revision Based on Fill	192
6.5.3 Letters of Map Revision	193
6.5.4 Physical Map Revisions	193
6.5.5 Contracted Restudies	194
6.5.6 Community Map History	194

SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION

195

7.1 Contracted Studies	195
7.2 Community Meetings	198

SECTION 8.0 – ADDITIONAL INFORMATION

200

SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES

201

Tables

	<u>Page</u>
Table 24: Floodway Data	186
Table 25: Flood Hazard and Non-Encroachment Data for Selected Streams	192
Table 26: Summary of Coastal Transect Mapping Considerations	192
Table 27: Incorporated Letters of Map Change	193
Table 28: Community Map History	195
Table 29: Summary of Contracted Studies Included in this FIS Report	195
Table 30: Community Meetings	199
Table 31: Map Repositories	200
Table 32: Additional Information	200
Table 33: Bibliography and References	202

TABLE OF CONTENTS

Volume 3 (continued)

Exhibits

<u>Flood Profiles</u>	<u>Panel</u>
Antioch Church Tributary	01P
Armstrong Mill Road Tributary	02P
Avon Tributary	03P-05P
Avon Tributary 1	06P
Baughman Fork	07P-09P
Baughman Fork Tributary 1	10P-11P
Baughman Fork Tributary 3	12P
Baughman Fork Tributary 3.1	13P
Baughman Fork Tributary 3.1.1	14P
Beacon Hill Tributary	15P
Bethel Road Tributary	16P-18P
Big Elm Tributary	19P
Big Tributary	20P
BM 897 Tributary	21P
BM 907-39 Tributary	22P
Boggs Fork	23P-26P
Boggs Fork Tributary 2	27P
Boone Creek	28P-32P
Boone Creek Tributary 1	33P
Boone Creek Tributary 2	34P
Bowman Mill Tributary	35P-37P
Bracktown Branch	38P-39P
Brighton Tributary	40P
Bryan Station Spring Tributary	41P
Bryan Station Spring Tributary 1	42P
Bryant Tributary	43P
Cadentown Branch	44P-45P
Cadentown Branch East	46P
Cane Run	47P-48P
Cave Creek	49P-50P
Cave Hill Tributary	51P-53P
Cemetery Tributary	54P
Colonial Drive Tributary	55P
David Fork	56P-57P
David Fork Tributary 1	58P
Delong Road Tributary	59P-60P
Dixie Tributary	61P-65P
Dogwood Tributary	66P
Douglas Park Tributary	67P-70P
Drive-in Tributary	71P
East Hickman Creek	72P-73P
East I-75 Tributary	74P

TABLE OF CONTENTS

Volume 4

Exhibits

<u>Flood Profiles</u>	<u>Panel</u>
Eastland Park Tributary	75P
Five Pond Tributary	76P
Flintridge Drive Tributary	77P
Gardenside Tributary	78P
Goose Creek	80P
Greendale Road Tributary	81P
Greenwich Road Tributary	82P
Harp Innis Road Tributary	83P-84P
Heliport Tributary	85P
Higbee Mill Road Tributary	86P-87P
Highway 68-27 Tributary	88P-89P
Highway 922 Tributary North Fork	90P
Highway 922 Tributary South Fork	91P
Howard Grove Tributary	92P
Huffman Mill Road Tributary	93P
Hughes Lane Tributary	94P
Hume Road Tributary	95P
I-64 Tributary	96P
I-75 Tributary	97P-99P
IBM Tributary	100P
Idle Hour Tributary	101P
Indian Hills Tributary	102P
Interchange Tributary	103P
Ironworks Tributary	104P
Jimtown Tributary	105P-106P
Johnson Road Tributary	107P
Jones Creek	108P-110P
Jones Creek Tributary 1	111P
Jones Creek Tributary 2	112P
Kearney Tributary	113P
Kentucky River	114P-116P
Lansdowne Drive Tributary	117P-118P
Lemons Mill Road Tributary	119P
Manchester Branch	120P-121P
Manchester Branch Tributary 1	122P
Mary Reynolds Creek	123P
Mattoxtown Tributary	124P
Melody Village Tributary	125P
Mt. Horeb Road Tributary	126P
Muir Station Road Tributary	127P-129P
North Branch A	130P
North Branch B	131P
North Elkhorn Creek	132P-136P

TABLE OF CONTENTS

Volume 4 (continued)

Exhibits

<u>Flood Profiles</u>	<u>Panel</u>
North Elkhorn Creek Tributary	137P
North Elkhorn Creek Tributary 17	138P
Old Pine Grove Tributary	139P
Parkers Mill Road Tributary	140P
Pine Grove Tributary	141P
Pipeline Tributary	142P
Pleasant Ridge Church Tributary	143P
Quarry Tributary	144P-145P
Radio Tower Tributary	146P
Reservoir Tributary	147P
Reservoir Tributary East	148P
Richmond Road Tributary	149P
Shadeland Tributary	150P
Shannon Run	151P-152P
Shannon Run Tributary 3	153P
Shelby Branch	154P
Shelby Branch Tributary 1	155P
Shelby Branch Tributary 2	156P
Shelby Branch Tributary 3	157P
Shelby Branch Tributary 3.1	158P
South Elkhorn Creek	159P-163P
Southpoint Tributary	164P-166P

TABLE OF CONTENTS

Volume 5

Exhibits

<u>Flood Profiles</u>	<u>Panel</u>
Squires Road Tributary	167P
Steeles Run	168P-170P
Stonewall Estates Tributary	171P
Stonewall Estates Tributary 2	173P
Tates Creek	174P-175P
Tiverton Way Tributary	176P-177P
Todds Road Tributary	178P-179P
Todds Road Tributary North	180P
Town Branch	181P-183P
Two Ponds Tributary	184P
U.K. Agriculture Station Branch	185P-187P
Unnamed Tributary to I-75 Tributary	188P
Unnamed Tributary to Lemons Mill Road Tributary	189P
Unnamed Tributary to North Elkhorn Creek Tributary	190P

TABLE OF CONTENTS

Volume 5 (continued)

Exhibits

<u>Flood Profiles</u>	<u>Panel</u>
Unnamed Tributary to Walnut Hill Church Tributary	191P
US Route 60 Tributary	192P
Vaughns Branch	193P-194P
Walnut Hill Church Tributary	195P
Waveland Museum Tributary	196P
West Hickman Creek	197P-199P
Wilson Downing Road Tributary	200P-201P
Wolf Run	202P-205P

Published Separately

Flood Insurance Rate Map (FIRM)

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC.)	REGULATORY (NAVD)	WITHOUT FLOODWAY (NAVD)	WITH FLOODWAY (NAVD)	INCREASE
UNNAMED TRIBUTARY TO I-75 TRIBUTARY								
A	52	51	93	2.0	974.3	974.3	974.7	0.4
B	160	14	48	3.8	974.8	974.8	975.2	0.4
C	210	33	108	1.7	976.5	976.5	976.7	0.2
D	444	17	57	3.2	977.0	977.0	977.5	0.5
E	579	17	38	4.8	978.0	978.0	978.6	0.6
F	1,099	11	34	5.1	985.7	985.7	986.7	1.0
G	1,192	12	26	6.5	988.2	988.2	988.4	0.2
H	1,362	85	398	0.4	995.6	995.6	995.7	0.1
I	1,647	79	83	1.8	995.6	995.6	995.8	0.2
J	1,720	122	581	0.2	1001.1	1001.1	1001.2	0.0
K	2,019	33	95	1.0	1001.1	1001.1	1001.2	0.0
L	2,448	59	333	0.3	1010.1	1010.1	1010.1	0.0
M	2,729	43	101	1.0	1010.1	1010.1	1010.1	0.0
N	2,846	17	23	4.6	1011.2	1011.2	1011.3	0.1
UNNAMED TRIBUTARY TO NORTH ELKHORN CREEK TRIBUTARY								
A	940	32	124	9.0	965.0	965.0	966.0	1.0

¹ DISTANCE ABOVE MOUTH: UNNAMED TRIBUTARY TO I-75 TRIBUTARY AND UNNAMED TRIBUTARY TO NORTH ELKHORN CREEK TRIBUTARY IN FEET

² FLOODWAY WIDTH AT THIS SECTION HAS BEEN REVISED BASED ON NEW TOPOGRAPHY. NO NEW ANALYSIS HAS BEEN PERFORMED

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KY

FLOODWAY DATA

UNNAMED TRIBUTARY TO I-75 TRIBUTARY - UNNAMED TRIBUTARY TO
NORTH ELKHORN CREEK TRIBUTARY

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC.)	REGULATORY (NAVD)	WITHOUT FLOODWAY (NAVD)	WITH FLOODWAY (NAVD)	INCREASE
US ROUTE 60 TRIBUTARY								
A	0.09	43	152	1.2	936.1	936.1	936.6	0.5
B	0.29	9	22	8.5	945.1	945.1	945.3	0.2
C	0.57	40	125	3.0	961.0	961.0	961.0	0.0
D	0.65	42	175	0.3	964.4	964.4	965.1	0.7
E	0.77	210	1472	0.1	981.3	981.3	982.0	0.7
F	0.84	25	95	1.4	981.3	981.3	982.0	0.7
VAUGHNS BRANCH								
A	0.34	62	192	11.1	890.8	890.8	980.8	0.0
B	0.55	30	190	10.4	895.8	895.8	896.4	0.6
C	0.77	71	706	4.1	908.5	908.5	909.5	1.0
D	0.94	124	717	4.5	908.8	908.8	909.8	1.0
E	1.35	89	497	5.6	918.2	918.2	918.7	0.5
F	1.55	84	377	5.6	920.8	920.8	921.8	1.0
G	2.07	92	350	3.9	933.3	933.3	934.3	1.0
H	2.17	46	144	9.6	938.9	938.9	938.9	0.0
WAVELAND MUSEUM TRIBUTARY								
A	0.02	35	176	5.7	930.9	930.9	931.1	0.2
B	0.15	20	130	7.7	934.2	934.2	934.7	0.5
C	0.22	100	820	1.2	940.1	940.1	940.8	0.7
D	0.74	255	2,962	0.3	951.7	951.7	952.7	1.0
E	0.95	70	358	2.8	957.9	957.9	958.8	0.9
F	1.26	37	142	7.1	974.1	974.1	974.9	0.8

¹ MILES ABOVE MOUTH

² FLOODWAY WIDTH AT THIS SECTION HAS BEEN REVISED BASED ON NEW TOPOGRAPHY. NO NEW ANALYSIS HAS BEEN PERFORMED.

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KY

FLOODWAY DATA

US ROUTE 60 TRIBUTARY - VAUGHNS BRANCH - WAVELAND
MUSEUM TRIBUTARY

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (NAVD)	WITHOUT FLOODWAY (NAVD)	WITH FLOODWAY (NAVD)	INCREASE
West Hickman Creek								
A	28.76	422	3,463	2.2	890.0	890.0	890.9	0.9
B	29.37	302	1,776	4.3	892.7	892.7	893.6	0.9
C	29.38	301	2,327	3.3	895.4	895.4	895.6	0.2
D	29.58	176	1,299	4.9	896.0	896.0	896.2	0.2
E	30.08	129	954	6.6	898.5	898.5	899.1	0.6
F	30.31	193	1,635	3.2	901.3	901.3	901.4	0.1
G	30.71	169	880	6.0	903.0	903.0	903.4	0.4
H	30.75	49	435	12.2	903.0	903.0	903.4	0.4
I	30.76	49	439	12.1	903.0	903.0	903.2	0.2
J	30.79	60	446	11.9	903.4	903.4	903.6	0.2
K	30.80	110	705	5.9	905.1	905.1	906.0	0.9
L	31.42	89	670	6.0	911.6	911.6	912.6	1.0
M	31.54	128	701	2.2	912.7	912.7	913.6	0.9
N	31.67	75	353	4.4	913.0	913.0	913.8	0.8
O	32.05	35	224	5.9	920.8	920.8	921.1	0.3
P	32.32	48	165	8.0	923.5	923.5	924.3	0.8
Q	32.34	44	268	2.5	924.9	924.9	925.3	0.4
R	32.59	55	475	1.4	932.7	932.7	932.7	0.0
S	32.68	65	453	1.5	932.8	932.8	932.8	0.0
S1	33.00	42	180	3.9	933.0	933.0	933.2	0.2
S2	33.32	33	135	5.2	937.6	937.6	937.8	0.2
S3	33.37	102	418	1.6	940.0	940.0	940.0	0.0
S4	33.48	24	111	6.1	940.8	940.8	941.0	0.2

¹Stream distance in miles above mouth

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (NAVD)	WITHOUT FLOODWAY (NAVD)	WITH FLOODWAY (NAVD)	INCREASE
West Hickman Creek								
T	33.58	-	-	-	973.2	973.2	-	-
U	34.78	86	320	3	978.0	978.0	978.0	0.0
V	34.92	40	207	4	978.6	978.6	979.5	0.0
W ²	35.06	-	-	-	-	-	-	-

¹Stream distance in miles above mouth

²Floodway contained in culvert

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KY

FLOODWAY DATA

WEST HICKMAN CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC.)	REGULATORY (NAVD)	WITHOUT FLOODWAY (NAVD)	WITH FLOODWAY (NAVD)	INCREASE
WILSON-DOWNING ROAD TRIBUTARY								
A	0.09	50	289	5.5	907.1	907.1	907.8	0.7
B	0.20	22	268	5.9	915.5	915.5	915.8	0.3
C	0.42	139	466	3.4	918.6	918.6	919.5	0.9
D	0.75	69	341	4.6	931.3	931.3	932.3	1.0
E	0.93	163	1919	0.8	944.9	944.9	945.9	1.0
F	1.13	85	500	3.3	945.0	945.0	946.0	1.0
G	1.55	60	295	5.7	961.9	961.9	962.8	0.9
H	1.62	60	215	2.9	966.2	966.2	966.9	0.7
I	1.72	56	298	2.1	974.1	974.1	974.9	0.8
J	1.79	50	174	3.6	978.3	978.3	979.1	0.8
¹ MILES ABOVE MOUTH								
TABLE 24	FEDERAL EMERGENCY MANAGEMENT AGENCY				FLOODWAY DATA			
	LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT, KY				WILSON-DOWNING ROAD TRIBUTARY			

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (NAVD)	WITHOUT FLOODWAY (NAVD)	WITH FLOODWAY (NAVD)	INCREASE
WOLF RUN								
A	0.07	270	2,520	1.5	868.8	868.8	869.8	1.0
B	0.52	170	818	4.8	869.2	869.2	870.2	1.0
C	0.85	152	723	5.4	874.2	874.2	875.2	1.0
D	1.26	300 ²	3,382	1.3	882.7	882.7	883.7	1.0
E	1.69	60	427	8.2	888.4	888.4	888.8	0.4
F	1.90	66	416	8.2	892.8	892.3	893.3	1.0
G	2.02	44	339	7.7	897.0	897.0	898.0	1.0
H	2.30	93	693	4.0	902.8	902.8	903.8	1.0
I	2.36	232	1,465	1.9	903.2	903.2	904.2	1.0
J	2.89	173	799	3.5	913.5	913.5	913.9	0.4
K	3.30	60	302	6.4	921.5	921.5	921.5	0.0
L	3.68	416	1,430	1.2	934.0	934.0	934.0	0.0
M	4.07	313	915	2.0	949.0	949.0	949.0	0.0
N	4.34	268	615	2.5	952.0	952.0	952.8	0.8
O	4.49	210	198	7.7	956.2	956.2	956.2	0.0
P	4.71	187	133	7.7	962.8	962.8	962.8	0.0
Q	5.12	332	1,171	2.8	974.6	974.6	974.6	0.0
R	5.22	18	36	8.6	983.7	983.7	983.7	0.0

¹ Miles above mouth

² Floodway at this section has been revised based on new topography. No new analysis has been performed.

Table 25: Flood Hazard and Non-Encroachment Data for Selected Streams

[Not Applicable to this FIS Project]

6.4 Coastal Flood Hazard Mapping

This section is not applicable to this FIS project.

Table 26: Summary of Coastal Transect Mapping Considerations

[Not Applicable to this FIS Project]

6.5 FIRM Revisions

This FIS Report and the FIRM are based on the most up-to-date information available to FEMA at the time of its publication; however, flood hazard conditions change over time. Communities or private parties may request flood map revisions at any time. Certain types of requests require submission of supporting data. FEMA may also initiate a revision. Revisions to FIS projects may take several forms, including Letters of Map Amendment (LOMAs), Letters of Map Revision Based on Fill (LOMR-Fs), Letters of Map Revision (LOMRs) (referred to collectively as Letters of Map Change (LOMCs)), Physical Map Revisions (PMRs), and FEMA-contracted restudies. These types of revisions are further described below. Some of these types of revisions do not result in the republishing of the FIS Report. To assure that any user is aware of all revisions, it is advisable to contact the community repository of flood-hazard data (shown in Table 31, “Map Repositories”).

6.5.1 Letters of Map Amendment

A LOMA is an official revision by letter to an effective NFIP map. A LOMA results from an administrative process that involves the review of scientific or technical data submitted by the owner or lessee of property who believes the property has incorrectly been included in a designated SFHA. A LOMA amends the currently effective FEMA map and establishes that a specific property is not located in a SFHA. A LOMA cannot be issued for properties located on the PFD (primary frontal dune).

To obtain an application for a LOMA, visit <http://www.fema.gov/floodplain-management/letter-map-amendment-loma> and download the form “MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill”. Visit the “Flood Map-Related Fees” section to determine the cost, if any, of applying for a LOMA.

FEMA offers a tutorial on how to apply for a LOMA. The LOMA Tutorial Series can be accessed at http://www.fema.gov/media/fhm/lomrf/ot_loma.html.

For more information about how to apply for a LOMA, call the FEMA Map Information eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627).

6.5.2 Letters of Map Revision Based on Fill

A LOMR-F is an official revision by letter to an effective NFIP map. A LOMR-F states FEMA’s determination concerning whether a structure or parcel has been elevated on fill above the base flood elevation and is, therefore, excluded from the SFHA.

Information about obtaining an application for a LOMR-F can be obtained in the same manner as that for a LOMA, by visiting <http://www.fema.gov> for the “MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill” or by calling the FEMA Map Information eXchange, toll free, at 1-877-FEMA MAP (1-877-336-2627). Fees for applying for a LOMR-F, if any, are listed in the “Flood Map-Related Fees” section.

A tutorial for LOMR-F is available at www.fema.gov/online-tutorials.

6.5.3 Letters of Map Revision

A LOMR is an official revision to the currently effective FEMA map. It is used to change flood zones, floodplain and floodway delineations, flood elevations and planimetric features. All requests for LOMRs should be made to FEMA through the chief executive officer of the community, since it is the community that must adopt any changes and revisions to the map. If the request for a LOMR is not submitted through the chief executive officer of the community, evidence must be submitted that the community has been notified of the request.

To obtain an application for a LOMR, visit <http://www.fema.gov> and download the form “MT-2 Application Forms and Instructions for Conditional Letters of Map Revision and Letters of Map Revision”. Visit the “Flood Map-Related Fees” section to determine the cost of applying for a LOMR. For more information about how to apply for a LOMR, call the FEMA Map Information eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627) to speak to a Map Specialist.

Previously issued mappable LOMCs (including LOMRs) that have been incorporated into the Fayette County FIRM are listed in Table 27.

Table 27: Incorporated Letters of Map Change

Case Number	Effective Date	Flooding Source	FIRM Panel(s)
13-04-3690P	8/18/2014	Wolf Run	2100670119E
14-04-7921A	8/21/2014	Gardenside Tributary, Wolf Run	2100670116E
13-04-4124C	10/08/2013	West Hickman Creek	2100670226F

6.5.4 Physical Map Revisions

PMRs are an official republication of a community’s NFIP map to effect changes to base flood elevations, floodplain boundary delineations, regulatory floodways and planimetric features. These changes typically occur as a result of structural works or improvements, annexations resulting in additional flood hazard areas or correction to base flood elevations or SFHAs.

The community’s chief executive officer must submit scientific and technical data to FEMA to support the request for a PMR. The data will be analyzed and the map will be revised if warranted. The community is provided with copies of the revised information and is afforded a review period. When the base flood elevations are changed, a 90-day appeal period is provided. A 6-month adoption period for formal approval of the revised map(s) is also provided.

For more information about the PMR process, please visit <http://www.fema.gov> and visit the “Flood Map Revision Processes” section.

6.5.5 Contracted Restudies

The NFIP provides for a periodic review and restudy of flood hazards within a given community. FEMA accomplishes this through a national watershed-based mapping needs assessment strategy, known as the Coordinated Needs Management Strategy (CNMS). The CNMS is used by FEMA to assign priorities and allocate funding for new flood hazard analyses used to update the FIS Report and FIRM. The goal of CNMS is to define the validity of the engineering study data within a mapped inventory. The CNMS is used to track the assessment process, document engineering gaps and their resolution, and aid in prioritization for using flood risk as a key factor for areas identified for flood map updates. Visit www.fema.gov to learn more about the CNMS or contact the FEMA Regional Office listed in Section 8 of this FIS Report.

6.5.6 Community Map History

The current FIRM presents flooding information for the entire geographic area of Fayette County. Previously, separate FIRMs, Flood Hazard Boundary Maps (FHBM) and/or Flood Boundary and Floodway Maps (FBFMs) may have been prepared for the incorporated communities and the unincorporated areas in the county that had identified SFHAs. Current and historical data relating to the maps prepared for the project area are presented in Table 28, “Community Map History.” A description of each of the column headings and the source of the date is also listed below.

- *Community Name* includes communities falling within the geographic area shown on the FIRM, including those that fall on the boundary line, nonparticipating communities, and communities with maps that have been rescinded. Communities with No Special Flood Hazards are indicated by a footnote. If all maps (FHBM, FBFM, and FIRM) were rescinded for a community, it is not listed in this table unless SFHAs have been identified in this community.
- *Initial Identification Date (First NFIP Map Published)* is the date of the first NFIP map that identified flood hazards in the community. If the FHBM has been converted to a FIRM, the initial FHBM date is shown. If the community has never been mapped, the upcoming effective date or “pending” (for Preliminary FIS Reports) is shown. If the community is listed in Table 28 but not identified on the map, the community is treated as if it were unmapped.
- *Initial FHBM Effective Date* is the effective date of the first Flood Hazard Boundary Map (FHBM). This date may be the same date as the Initial NFIP Map Date.
- *FHBM Revision Date(s)* is the date(s) that the FHBM was revised, if applicable.
- *Initial FIRM Effective Date* is the date of the first effective FIRM for the community. This is the first effective date that is shown on the FIRM panel.
- *FIRM Revision Date(s)* is the date(s) the FIRM was revised, if applicable. This is the revised date that is shown on the FIRM panel, if applicable. As countywide studies are completed or revised, each community listed should have its FIRM dates updated accordingly to reflect the date of the countywide study. Once the FIRMs exist in countywide format, as Physical Map Revisions (PMR) of FIRM panels within the county

are completed, the FIRM Revision Dates in the table for each community affected by the PMR are updated with the date of the PMR, even if the PMR did not revise all the panels within that community.

The initial effective date for the Fayette County FIRMs in countywide format was 9/17/2008.

Table 28: Community Map History

Community Name	Initial Identification Date (First NFIP Map Published)	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
Lexington-Fayette Urban County Government, Kentucky	02/15/1974	02/15/1974	03/26/1976	09/28/1979	03/03/2014 09/17/2008 09/03/1992

SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION

7.1 Contracted Studies

Table 29 provides a summary of the contracted studies, by flooding source, that are included in this FIS Report.

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
West Hickman Creek Tributary 1, West Hickman Creek	TBD	AECOM	EMA-2012-CA-5465	July 2015	Lexington-Fayette Urban County Government

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Antioch Church Tributary, Avon Tributary, Avon Tributary 1, Baughman Fork, Baughman Fork Tributary 1, Baughman Fork Tributary 3, Baughman Fork Tributary 3.1, Baughman Fork Tributary 3.1.1, Bethel Road Tributary, Big Tributary, Big Tributary, BM 897 Tributary, BM 907-39 Tributary, Boggs Fork, Boggs Fork Tributary 2, Boone Creek, Boone Creek Tributary 1, Boone Creek Tributary 2, Bryan Station Spring Tributary, Bryan Station Spring Tributary 1, Bryant Tributary, Cemetery Tributary, David Fork, David Fork Tributary 1, Dixie Tributary, East I-75 Tributary, Five Pond Tributary, Goose Creek, Greenbrier Lake, Greenwich Road Tributary, Harp Innis Road Tributary, Heliport Tributary, Highway 68-27 Tributary, Highway 922 Tributary North Fork, Highway 922 Tributary South Fork, Howard Grove Tributary, Huffman Mill Road Tributary, Hughes Lane Tributary, I-64 Tributary, I-75 Tributary, Interchange Tributary, Ironworks Tributary, Jimtown Tributary, Johnson Road Tributary, Jones Creek, Jones Creek Tributary 1, Jones Creek Tributary 2, Kearney Tributary, Kentucky River, Lemons Mill Road Tributary, Manchester Branch, Manchester Branch Tributary 1, Mary Reynolds Creek, Mattoxtown Tributary, Mt. Horeb Road Tributary, Muir Station Road Tributary, North Branch, North Elkhorn Creek, Old Pine Grove Tributary, Pine Grove Tributary, Pipeline Tributary, Pleasant Ridge Church Tributary, Quarry Tributary, Radio Tower Tributary, Shannon Run, Shannon Run Tributary 1, Shannon Run Tributary 3, Shelby Branch, Shelby Branch Tributary 1, Shelby Branch Tributary 2, Shelby Branch Tributary 3, Shelby Branch Tributary 3.1, South Elkhorn Creek, Southpoint Tributary, Stonewall Estates Tributary 2, Todds Road Tributary, Two Ponds Tributary, Unnamed Tributary, Unnamed Tributary to Lemons Mill Road Tributary, Unnamed Tributary to Walnut Hill Church Tributary, Walnut Hill Church Tributary	3/3/14	URS Corp	EMA-2009-CA-5931	3/2012	Lexington-Fayette Urban County Government

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Wolf Run Creek, Cave Hill Tributary/ Bowman Mill Tributary, Bryant Tributary, and Southpoint Tributary	9/17/08	Fuller, Mossbarger, Scott, and May Engineers, Inc. (Bowman Mill/ Cave Hill), Jones & Henry Engineers, LLC (Wolf Run), Tetra Tech Inc. (Bryant Tributary), and Parsons, Brinckerhoff, Quade, and Douglas (Southpoint Tributary)	EMA-2003-GR5389	9/26/03	Lexington-Fayette Urban County Government

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
West Hickman Creek downstream of Reservoir No. 3 , Higbee Mill Road Tributary, Tates Creek, Lansdowne Drive Tributary, Tiverton Way Tributary, Reservoir Tributary East, Cadentown Branch, Cadentown Branch East, Todds Road Tributary, Todds Road Tributary North, Cane Run upstream of Interstate 75 and downstream of the confluence of IBM Tributary, Flintridge Drive Tributary, Shadeland Tributary, Eastland Parkway Tributary downstream of the confluence of US Route 60 Tributary, Pleasant Ridge Church Tributary, Two Ponds Tributary, Dogwood Tributary, Wilson Downing Road Tributary, Drive-In Tributary, Quarry Tributary, Parkers Mill Tributary, East I-75 Tributary, US Route 60 Tributary, Cave Creek, Waveland Museum Tributary, I-75 Tributary upstream of Interstate 75 and South Elkhorn Creek upstream of US Route 60 and downstream of Higbee Mill Road	9/3/92	GRW Engineers, Inc	EMW-89-C-2825	9/1990	Lexington-Fayette Urban County Government

7.2 Community Meetings

The dates of the community meetings held for this FIS project and any previous FIS projects are shown in Table 30. These meetings may have previously been referred to by a variety of names (Community Coordination Officer (CCO), Scoping, Discovery, etc.), but all meetings represent opportunities for FEMA, community officials, study contractors, and other invited guests to discuss the planning for and results of the project.

Table 30: Community Meetings

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Lexington-Fayette Urban County Government	TBD	9/12/2012	Discovery	Representatives of FEMA, KDOW, U.S. Army Corps of Engineers (Huntington District), the study contractor, and local community officials
		11/3/2015, 11/4/2015	Flood Risk Review Meeting	Representatives of FEMA, KDOW, USGS, AECOM, Stantec, Bluegrass ADD, and local community officials
			Resilience	TBD
			CCO Open House	TBD

SECTION 8.0 – ADDITIONAL INFORMATION

Information concerning the pertinent data used in the preparation of this FIS Report can be obtained by submitting an order with any required payment to the FEMA Engineering Library. For more information on this process, see <http://www.fema.gov>.

Table 31 is a list of the locations where FIRMs for Fayette County can be viewed. Please note that the maps at these locations are for reference only and are not for distribution. Also, please note that only the maps for the community listed in the table are available at that particular repository. A user may need to visit another repository to view maps from an adjacent community.

Table 31: Map Repositories

Community	Address	City	State	Zip Code
Lexington-Fayette Urban County Government	12th Floor, Lexington-Fayette Urban County Government Center 200 East Main Street	Lexington	KY	40507

The National Flood Hazard Layer (NFHL) dataset is a compilation of effective FIRM databases and LOMCs. Together they create a GIS data layer for a State or Territory. The NFHL is updated as studies become effective and extracts are made available to the public monthly. NFHL data can be viewed or ordered from the website shown in Table 32.

Table 32 contains useful contact information regarding the FIS Report, the FIRM, and other relevant flood hazard and GIS data. In addition, information about the state NFIP Coordinator and GIS Coordinator is shown in this table. At the request of FEMA, each Governor has designated an agency of State or territorial government to coordinate that State's or territory's NFIP activities. These agencies often assist communities in developing and adopting necessary floodplain management measures. State GIS Coordinators are knowledgeable about the availability and location of state and local GIS data in their state.

Table 32: Additional Information

FEMA and the NFIP	
FEMA and FEMA Engineering Library website	http://www.fema.gov
NFIP website	http://www.fema.gov/national-flood-insurance-program
NFHL Dataset	http://msc.fema.gov
FEMA Region IV	Federal Regional Office, 3003 Chamblee Tucker Rd, Atlanta, GA 30341 (770) 220-5200
Other Federal Agencies	
USGS website	http://www.usgs.gov
Hydraulic Engineering Center website	http://www.hec.usace.army.mil

Table 32: Additional Information

State Agencies and Organizations	
State NFIP Coordinator	Alex J. VanPelt Environmental Scientist IV Floodplain Management Branch Kentucky Division of Water 200 Fair Oaks Lane Frankfort, KY 40601 (502) 564-3410 alex.vanpelt@ky.gov
State GIS Coordinator	Kent Anness Kentucky Division of Geographic Information 100 Fair Oaks Frankfort, KY 40601 (502) 564-6268 kent.anness@ky.gov
Statewide Regulatory Coordinator	Carey Johnson Coordinating Technical Program Manager Kentucky Division of Water 200 Fair Oaks Lane Frankfort, KY 40601 (502) 564-3410 Carey.Johnson@ky.gov

SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES

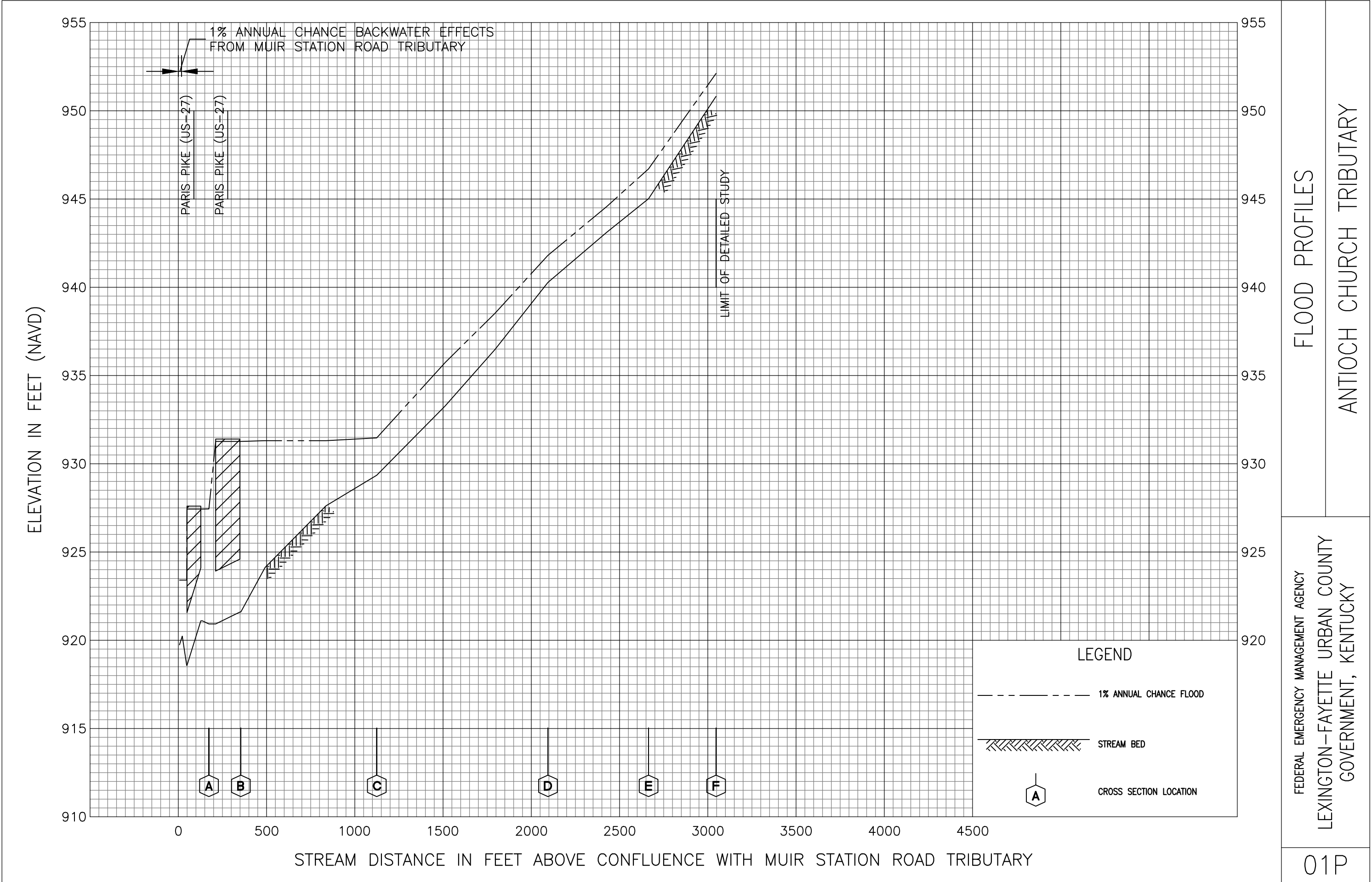
Table 33 includes sources used in the preparation of and cited in this FIS Report as well as additional studies that have been conducted in the study area.

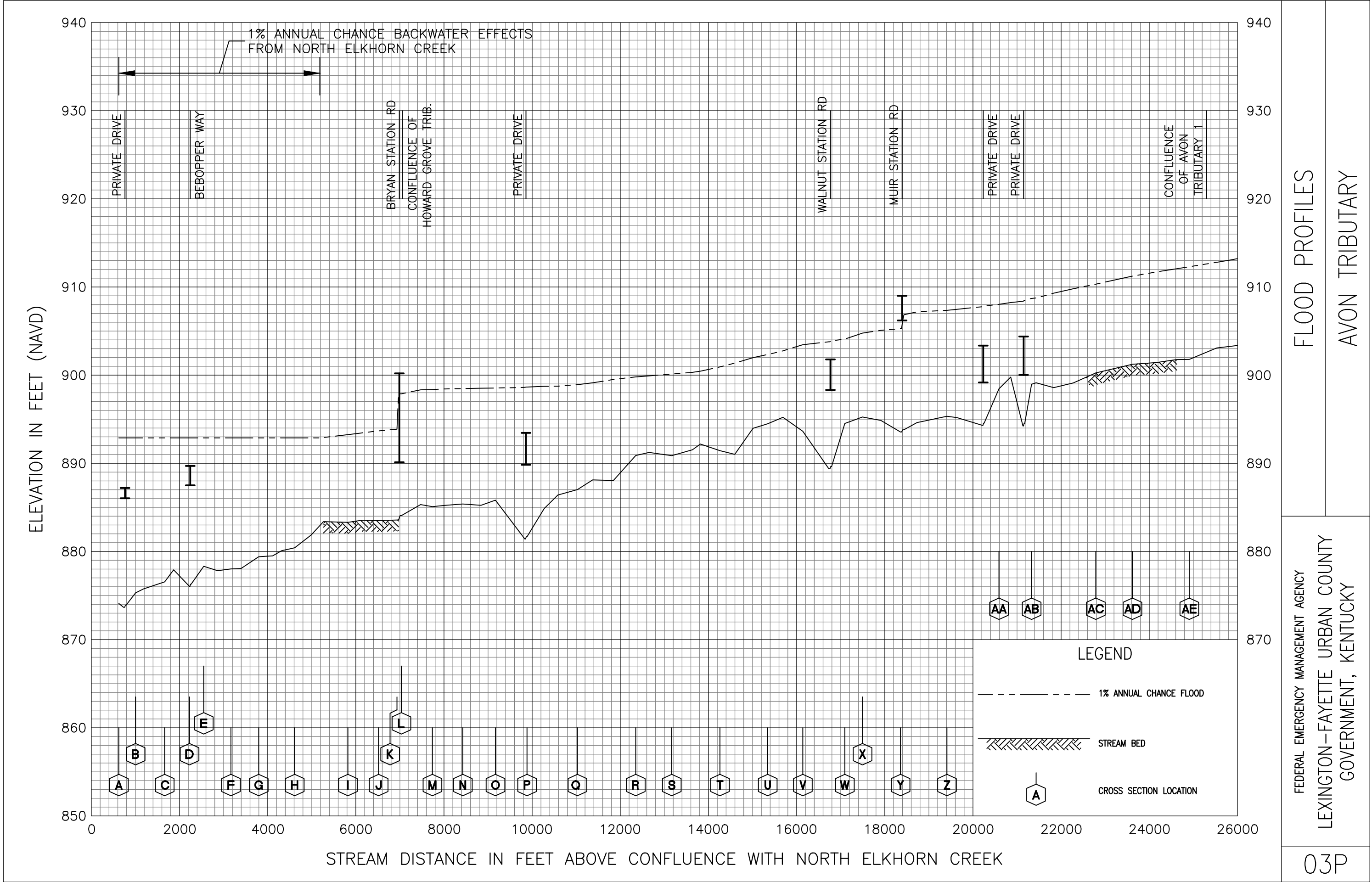
Table 33: Bibliography and References

Citation in this FIS	Publisher/Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
CED 2009	Cabinet for Economic Development	"Kentucky Quick Facts"			2009	http://www.thinkkentucky.com
Fayette 2014	Federal Emergency Management Agency	Flood Insurance Study, Lexington-Fayette Urban County Government (All Jurisdictions)		Washington D.C.	3-Mar-2014	
Fayette 2008	Federal Emergency Management Agency	Flood Insurance Study, Fayette County, Kentucky and Incorporated Areas		Washington D.C.	17-Sep-2008	
Fayette 1992	Federal Emergency Management Agency	Flood Insurance Study, Fayette County, Kentucky and Incorporated Areas		Washington D.C.	3-Sep-1992	
USACE 1984	U.S. Army Corps of Engineers	HEC-2 Water-Surface Profiles Generalized Computer Program	Hydrologic Engineering Center	Davis, California	Apr-84	
USACE 2004	U.S. Army Corps of Engineers	HEC-RAS "River Analysis System" Version 3.1.2	Hydrologic Engineering Center	Davis, California	Apr-04	
USACE 2010	U.S. Army Corps of Engineers	HEC-RAS "River Analysis System" Version 4.1.0	Hydrologic Engineering Center	Davis, California	Jan-10	

Table 33: Bibliography and References

Citation in this FIS	Publisher/ Issuer	<i>Publication Title</i> , "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
USGS 2003	U.S. Geological Survey	"Estimating the Magnitude of Peak Flows for Streams in Kentucky for Selected Recurrence Intervals." Water Resources Investigations Report 03-4180, 68 p.	Hodgkins, G.A. and Martin, G.R.		2003	

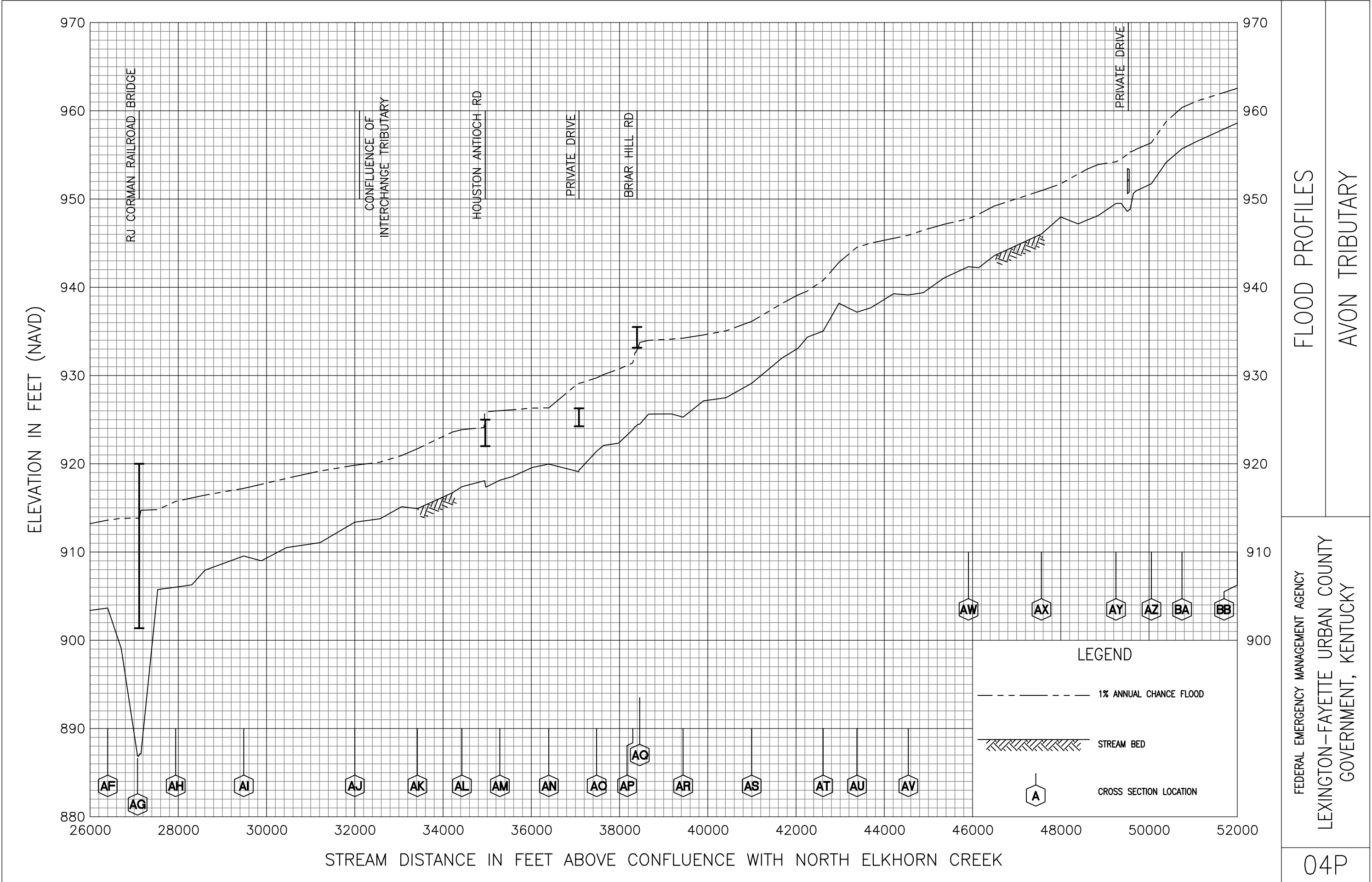


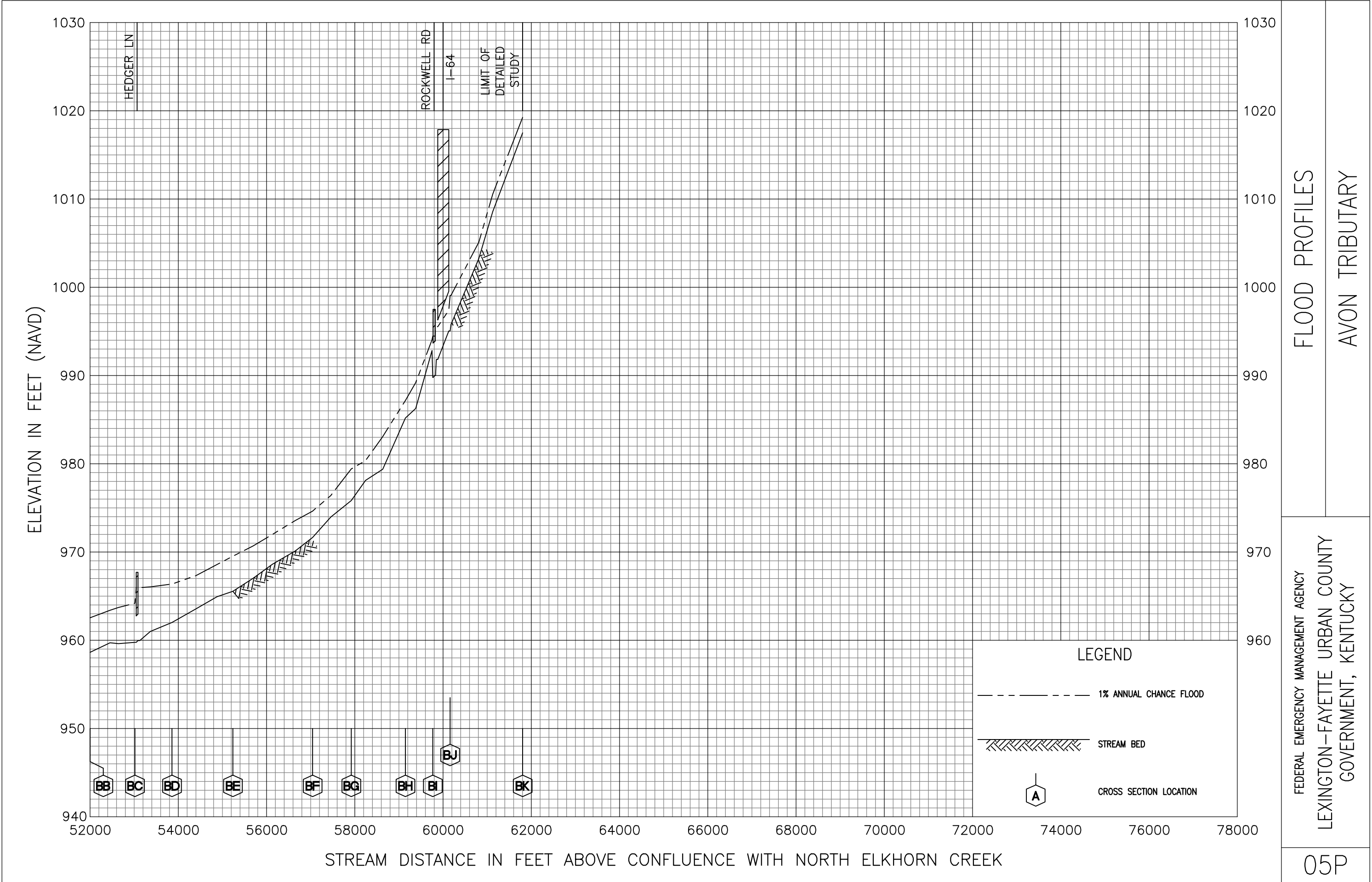


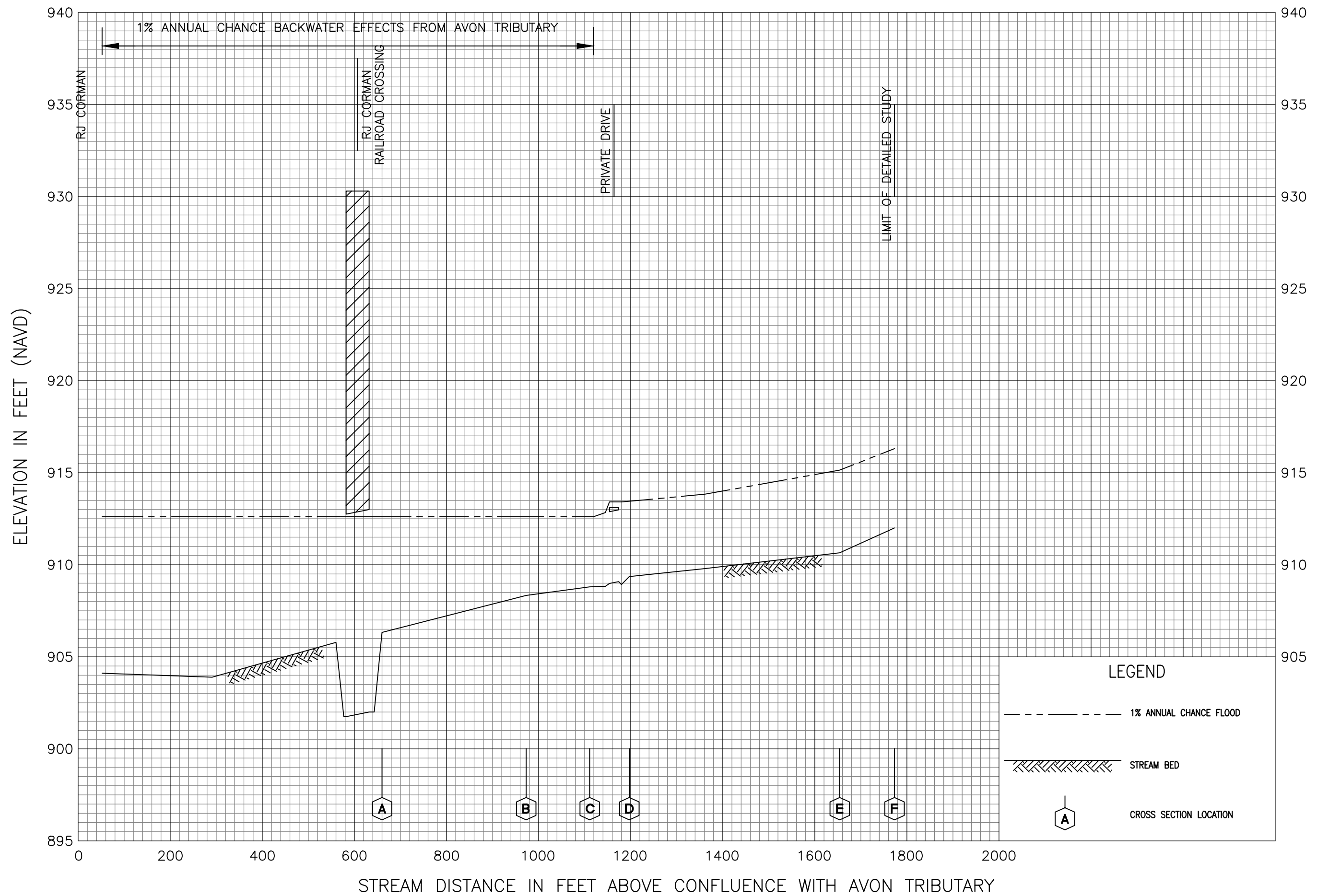
FLOOD PROFILES

AVON TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY





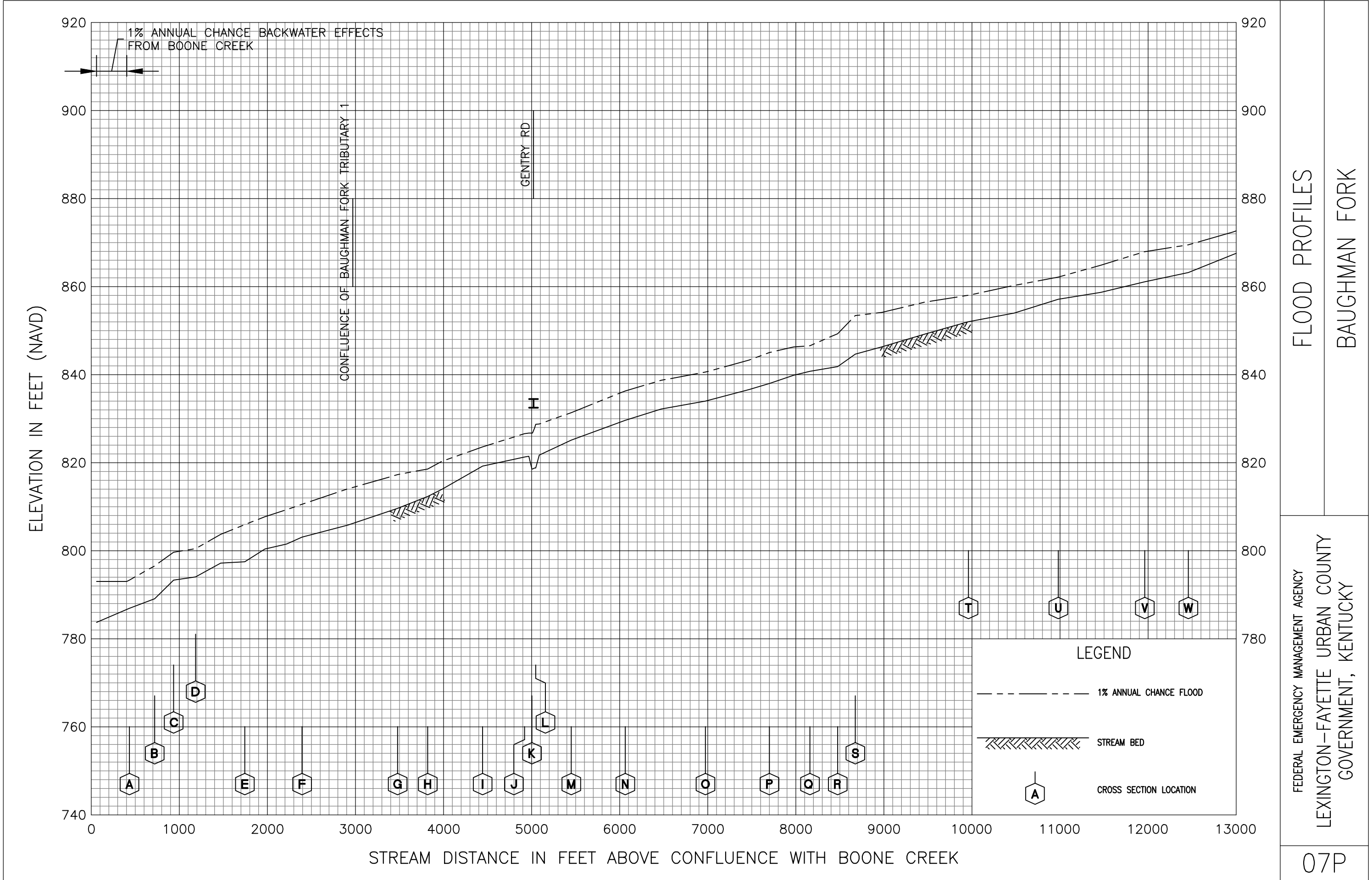


FLOOD PROFILES

AVON TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY

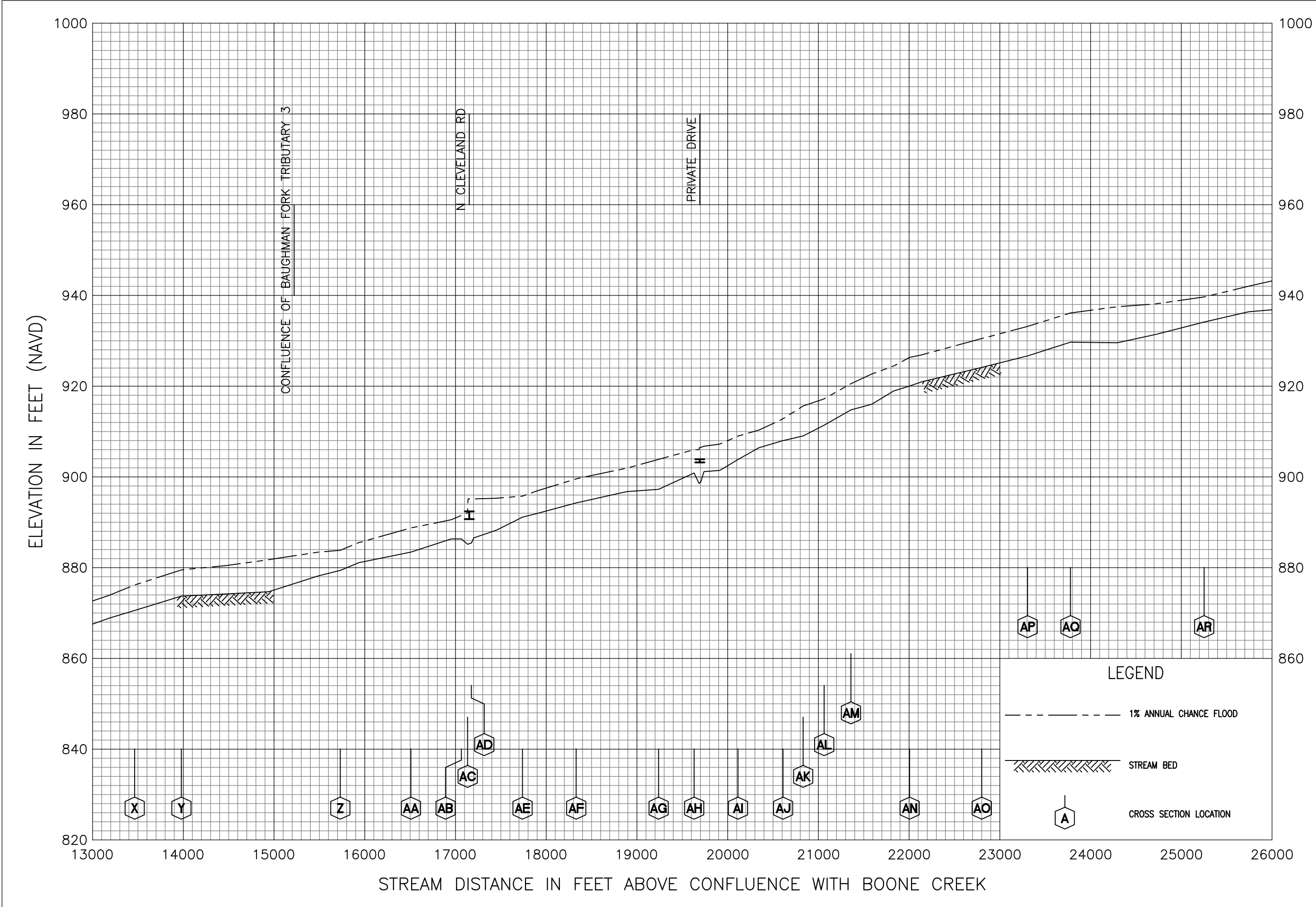
06P



FLOOD PROFILES

BAUGHMAN FORK

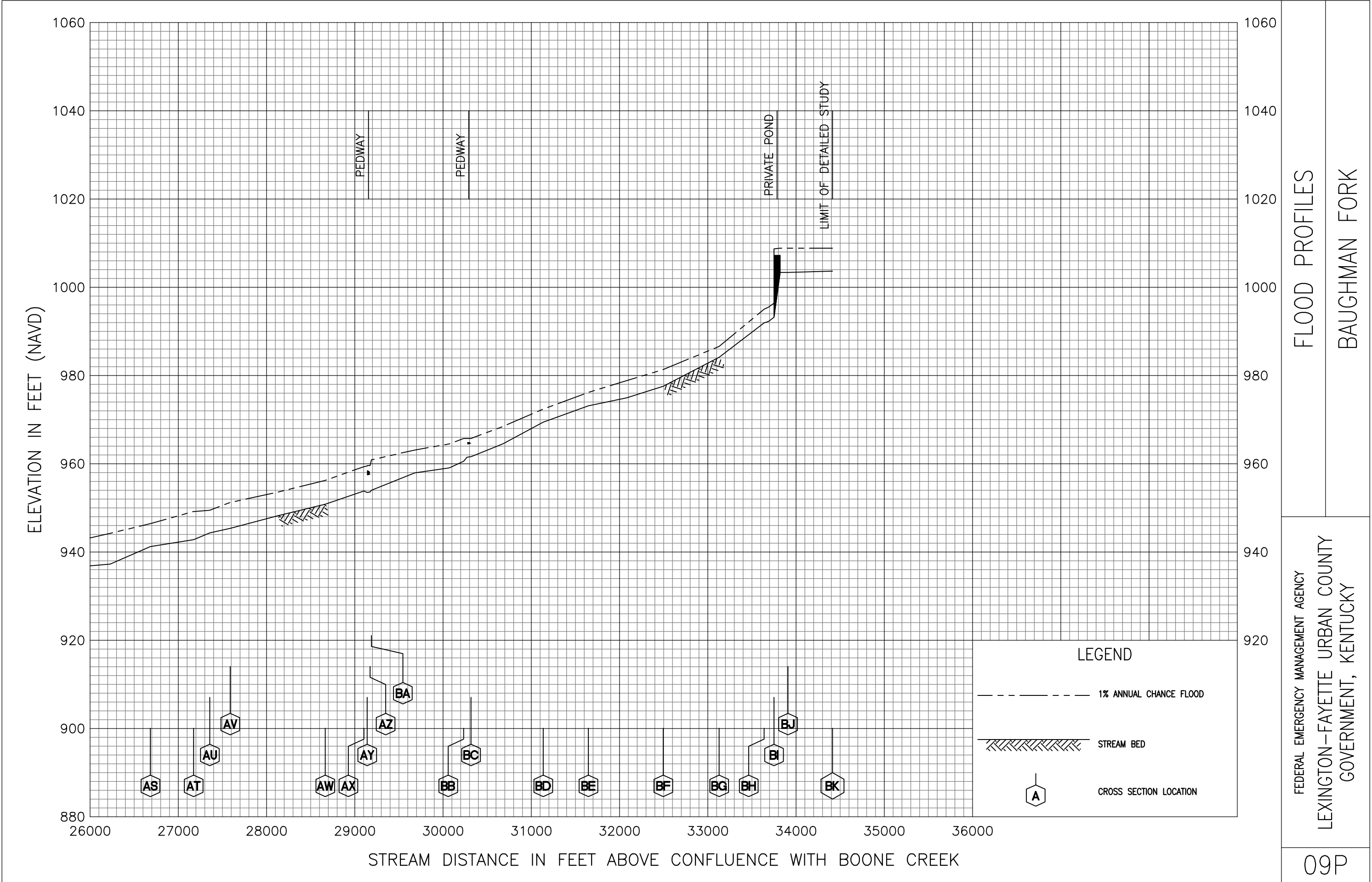
FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY

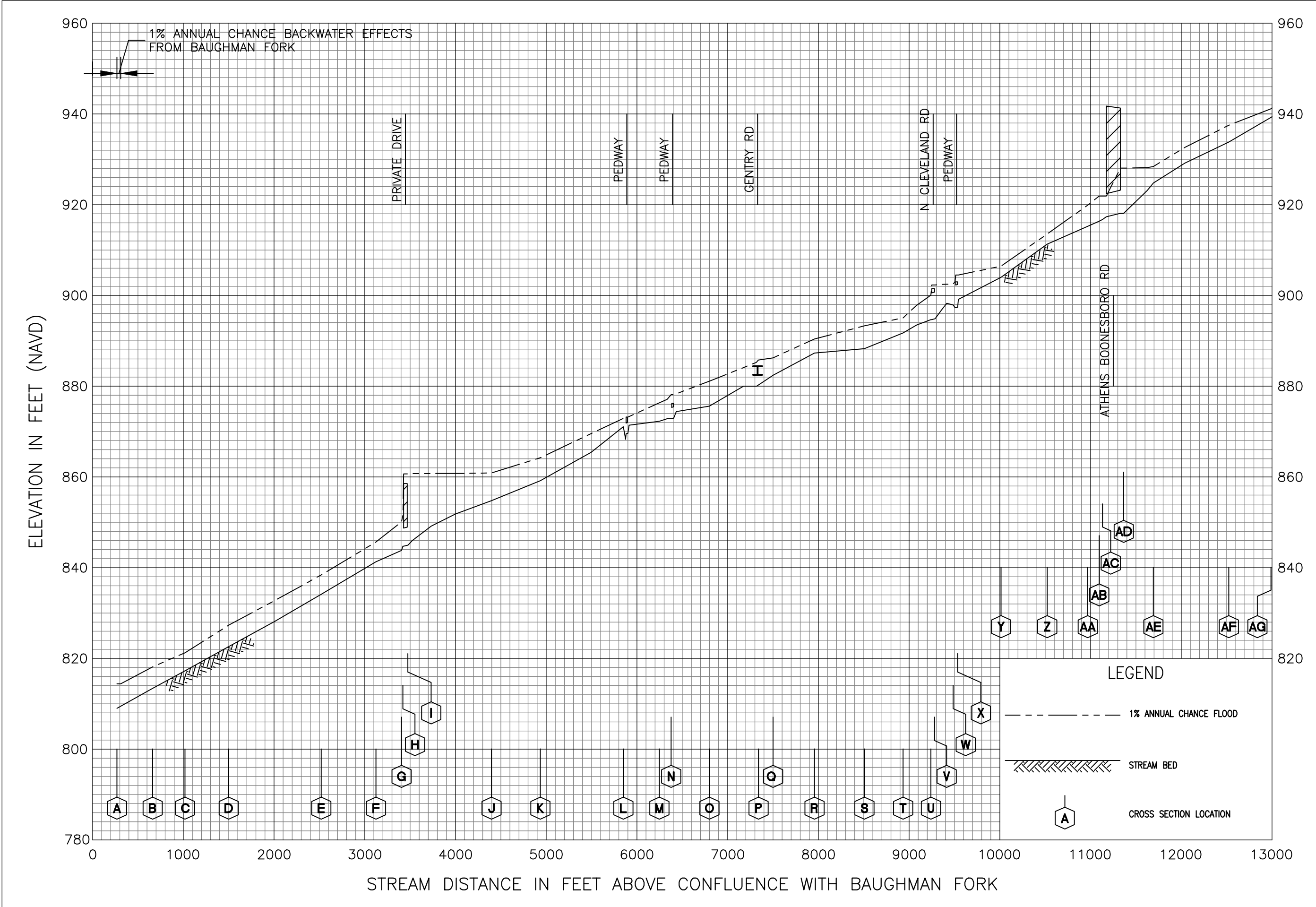


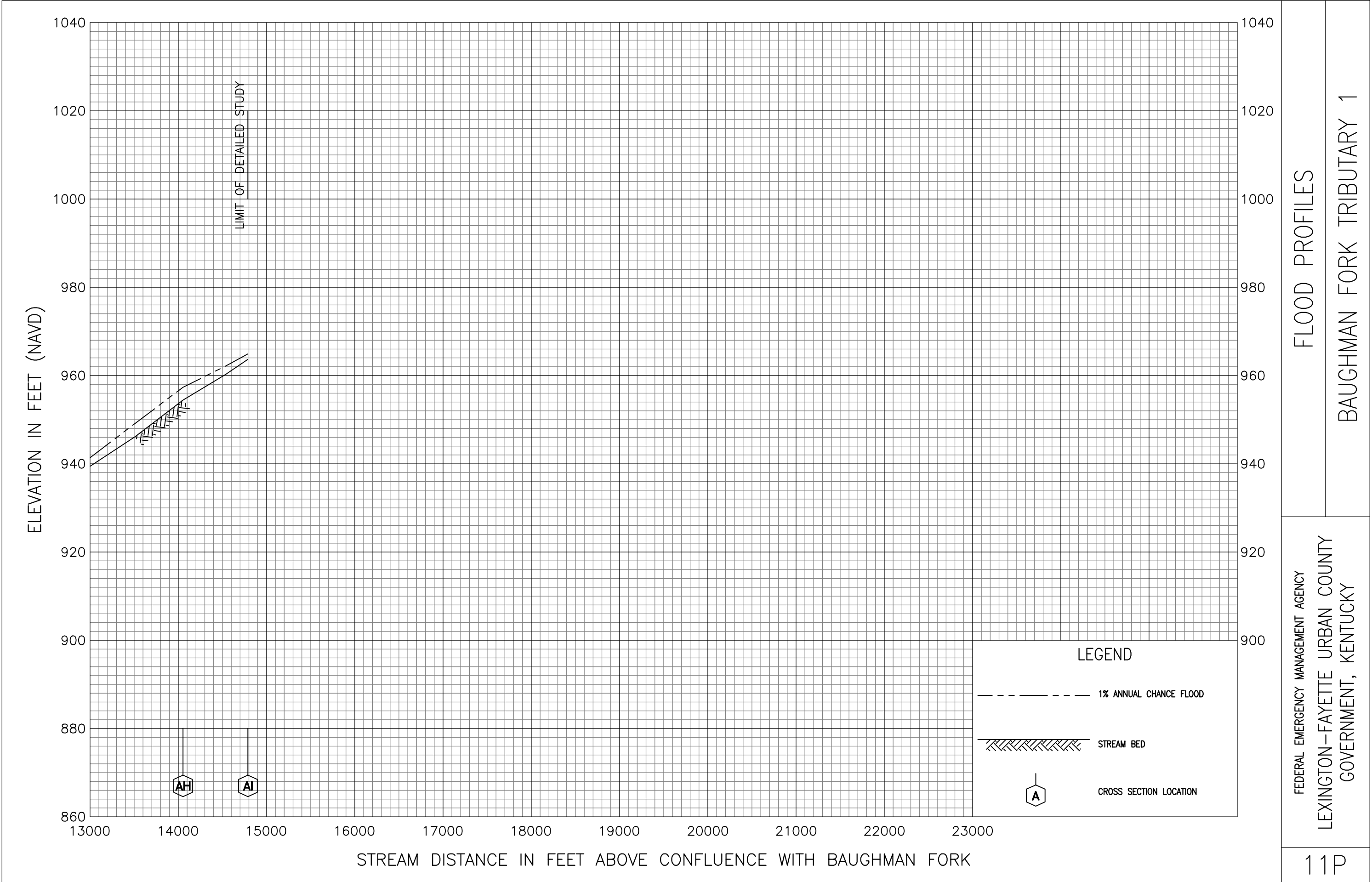
FLOOD PROFILES

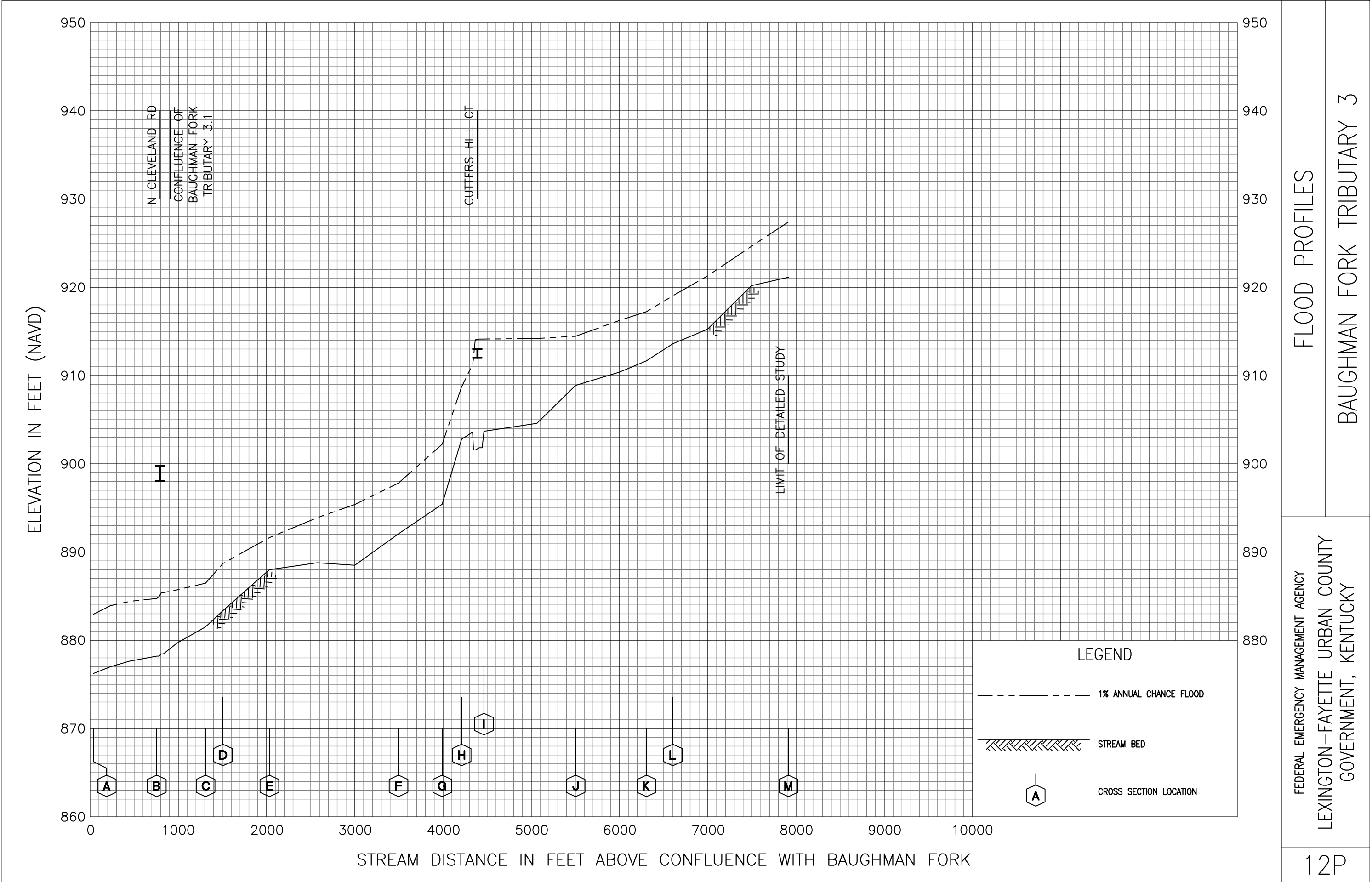
BAUGHMAN FORK

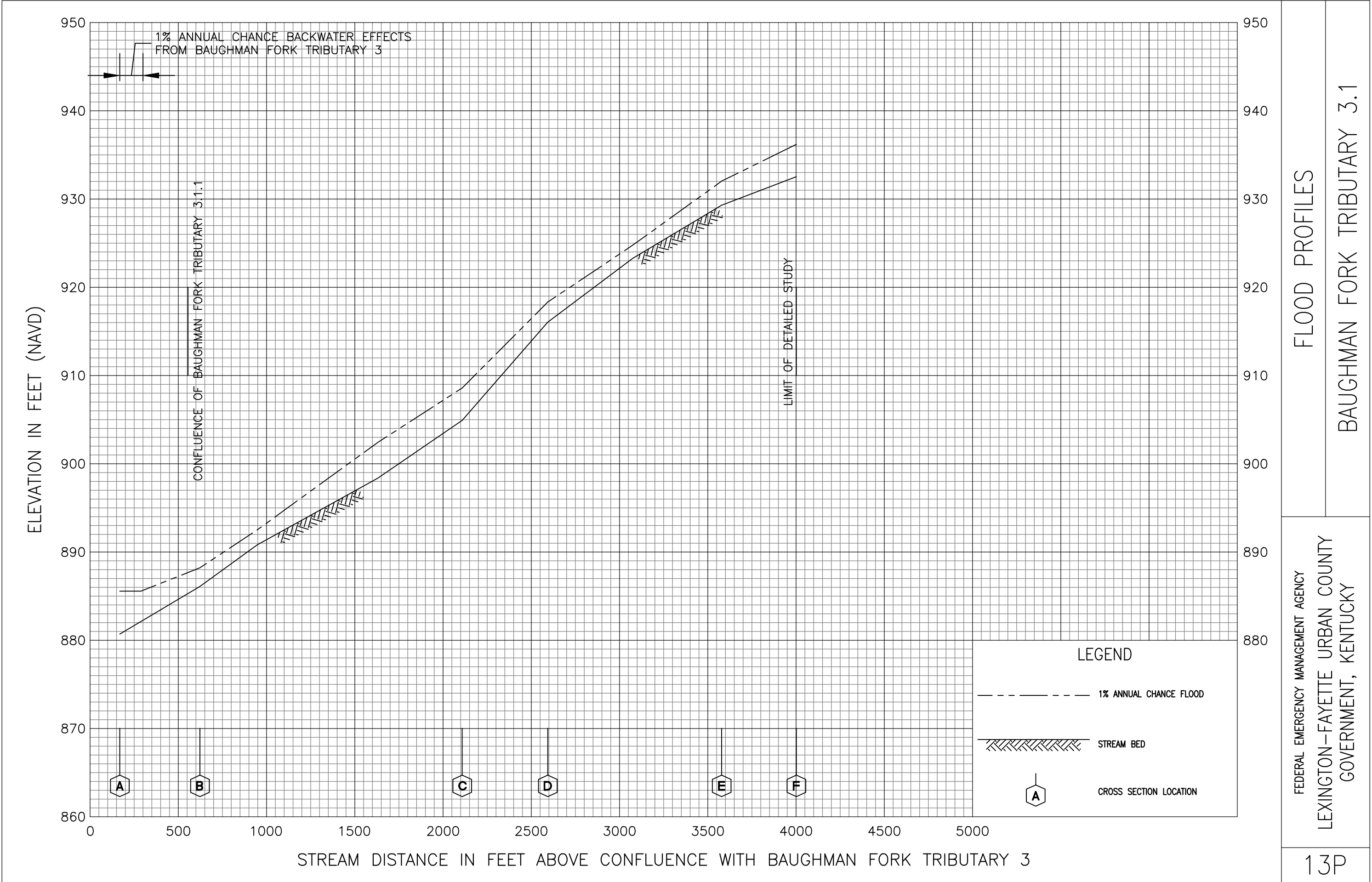
FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY

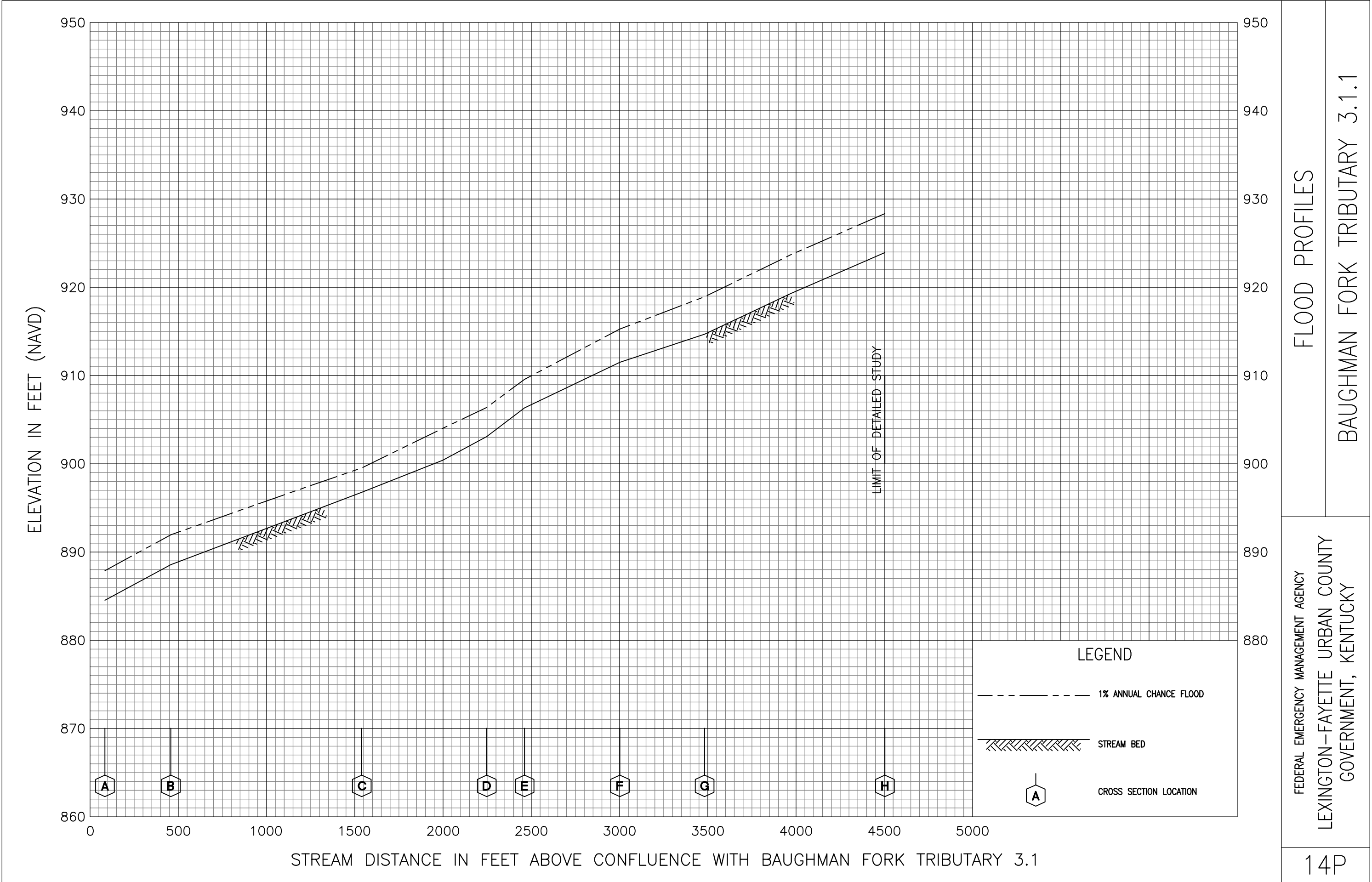


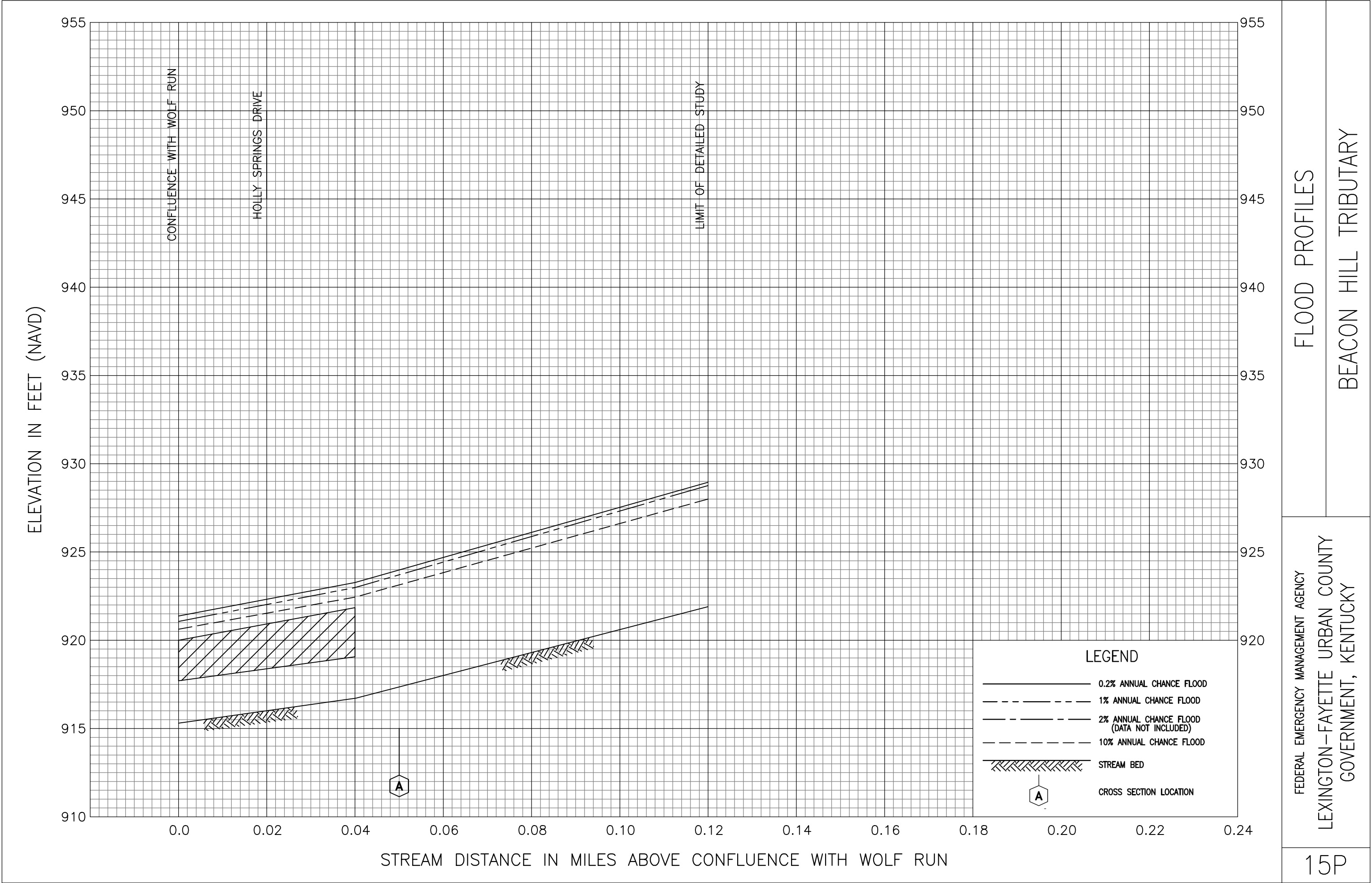


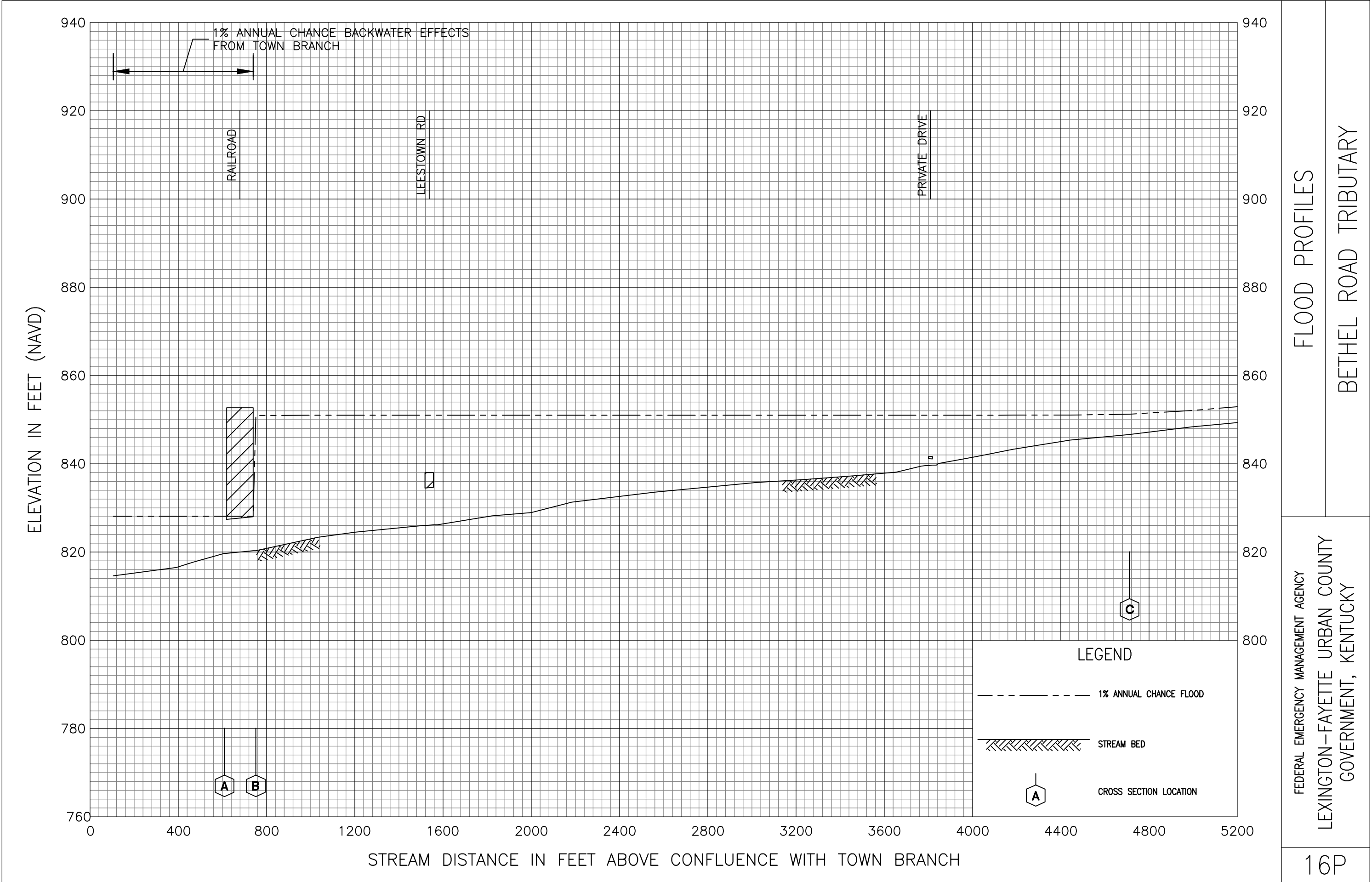


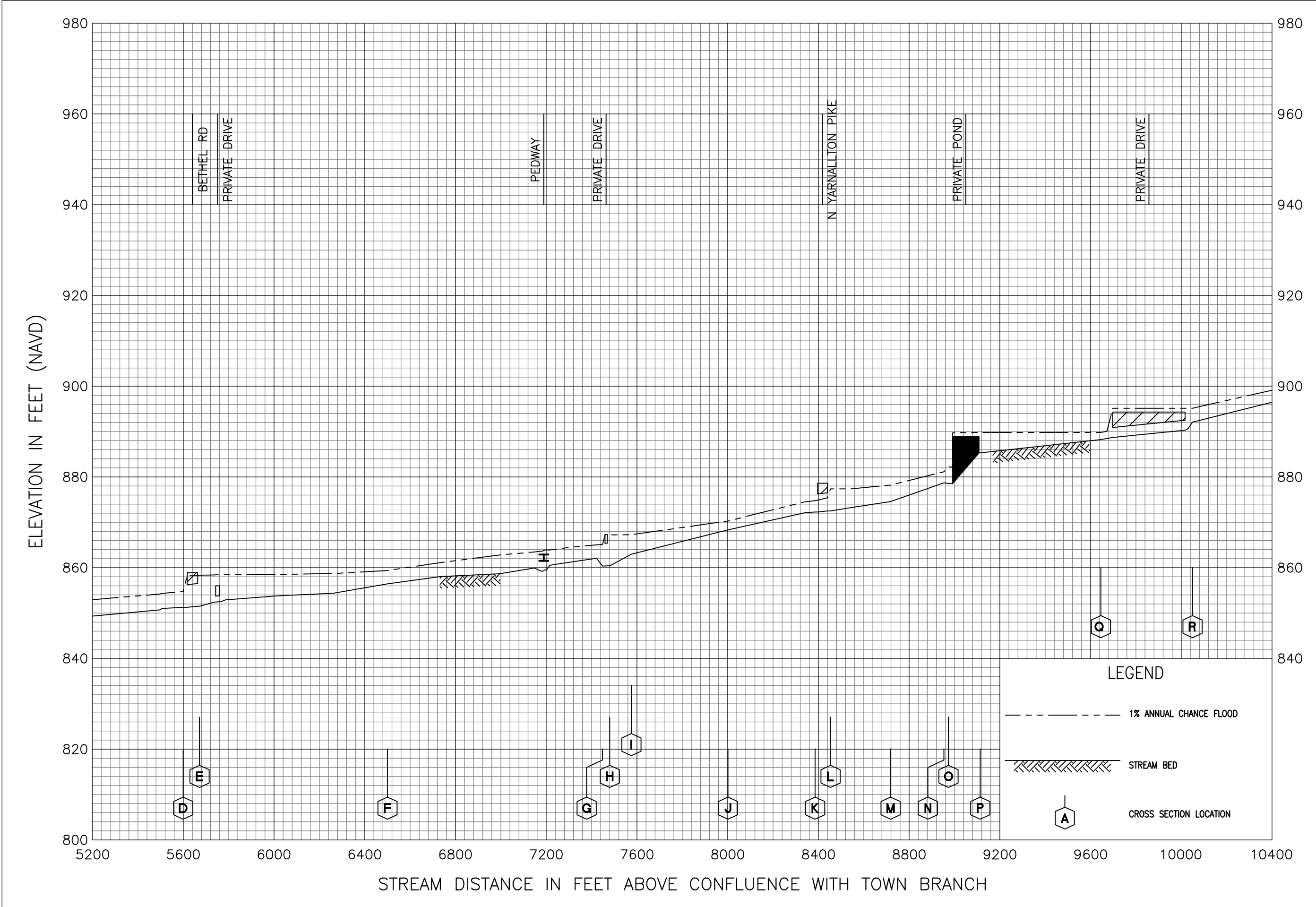


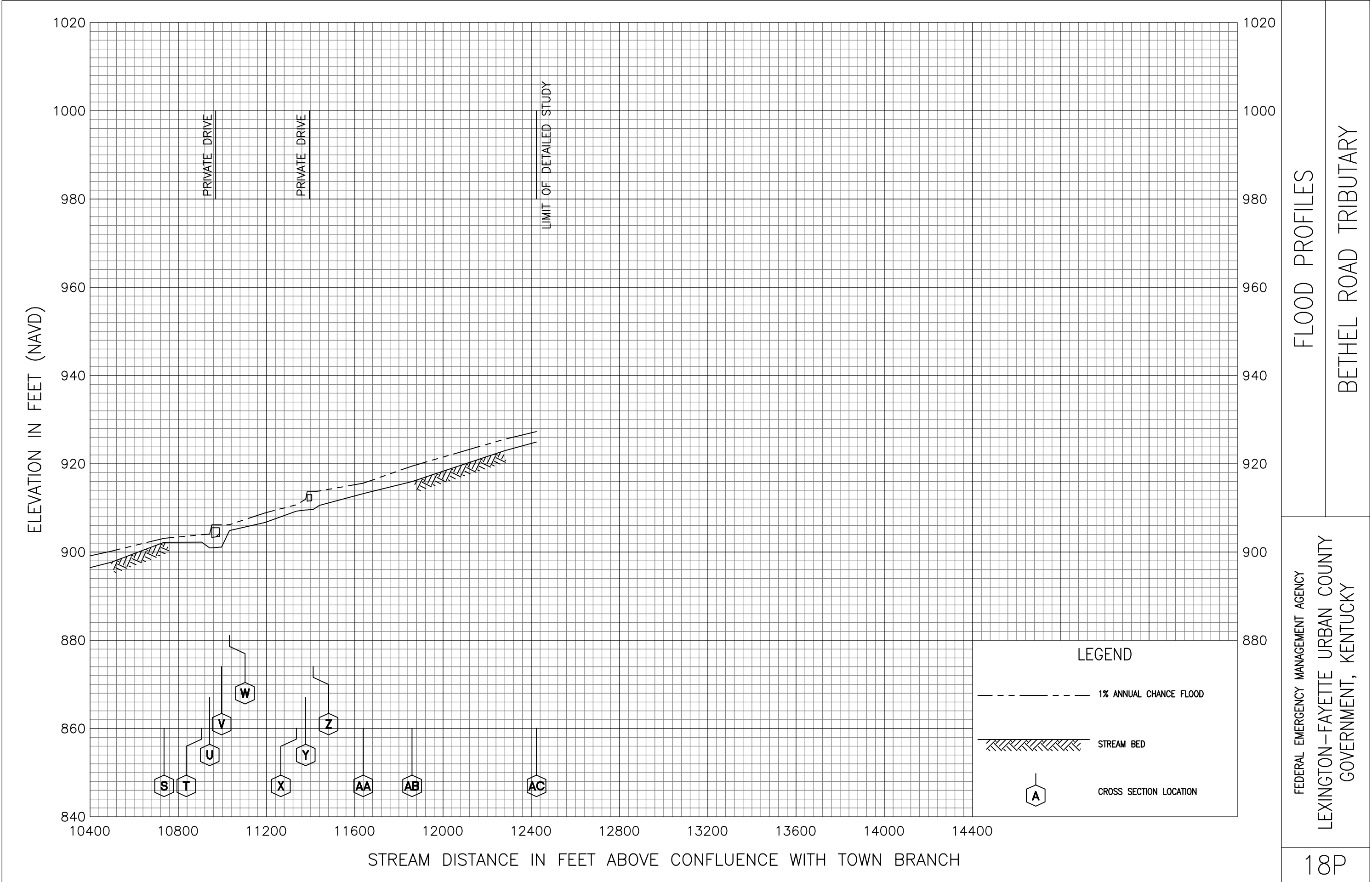








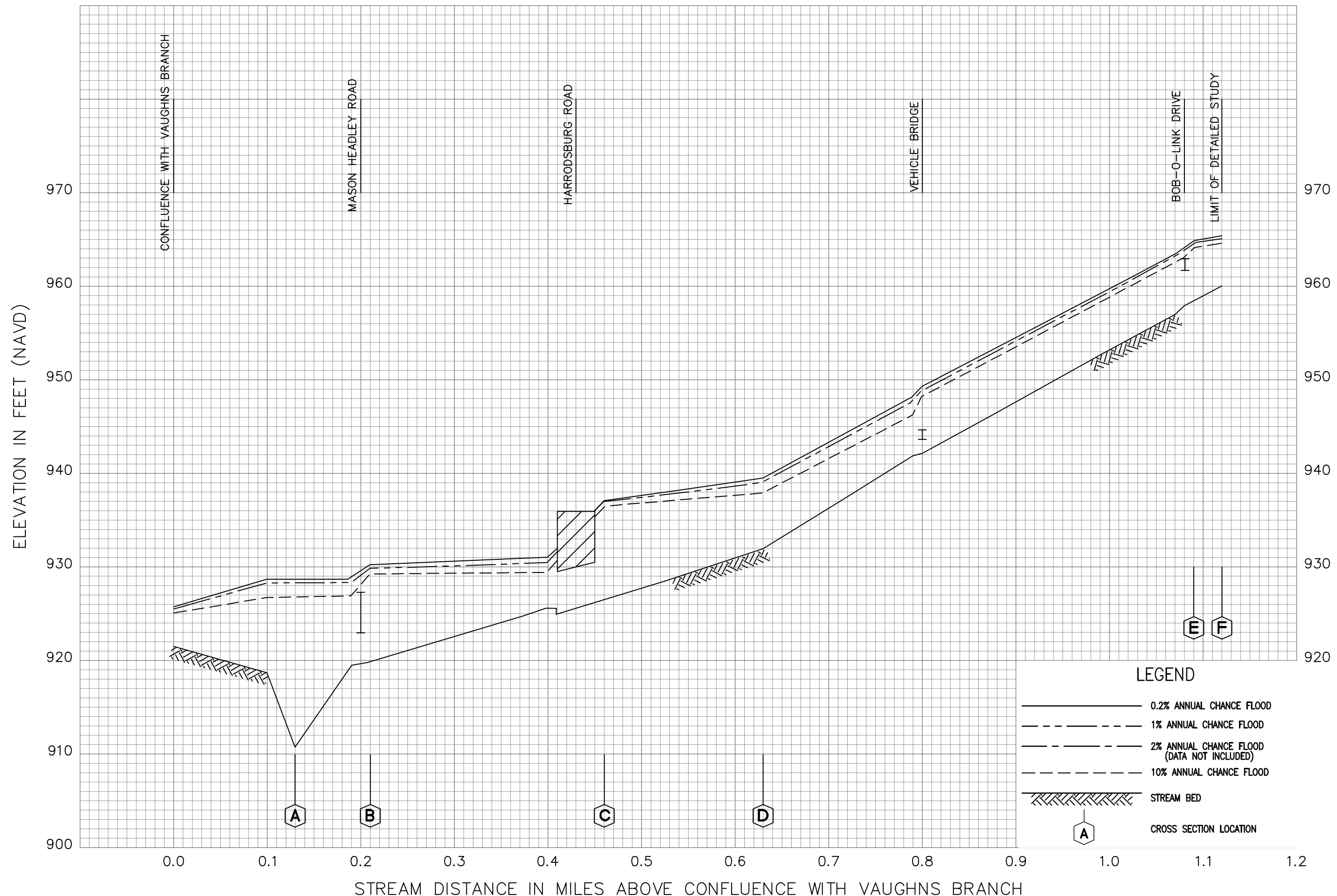




FLOOD PROFILES

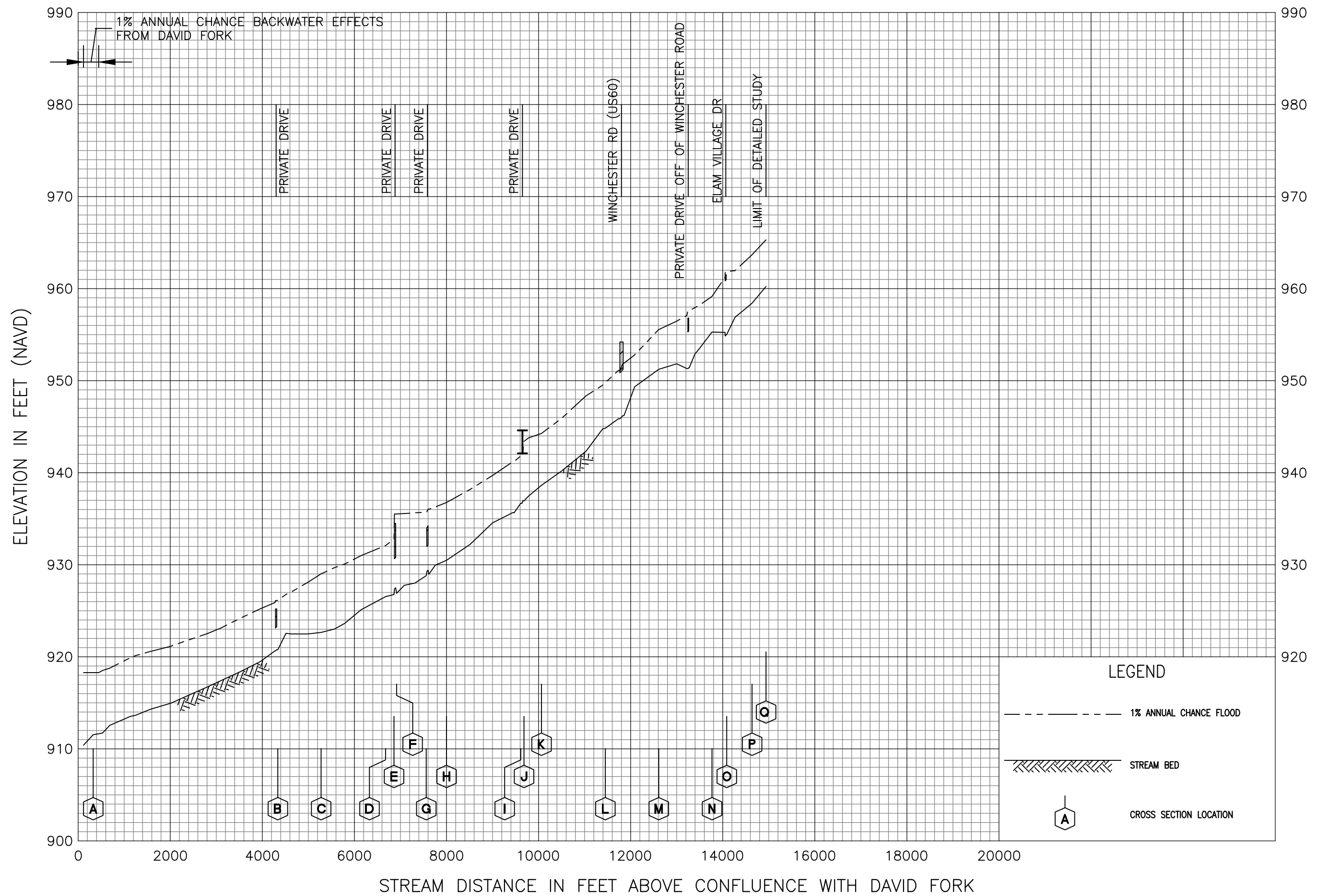
BETHEL ROAD TRIBUTARY

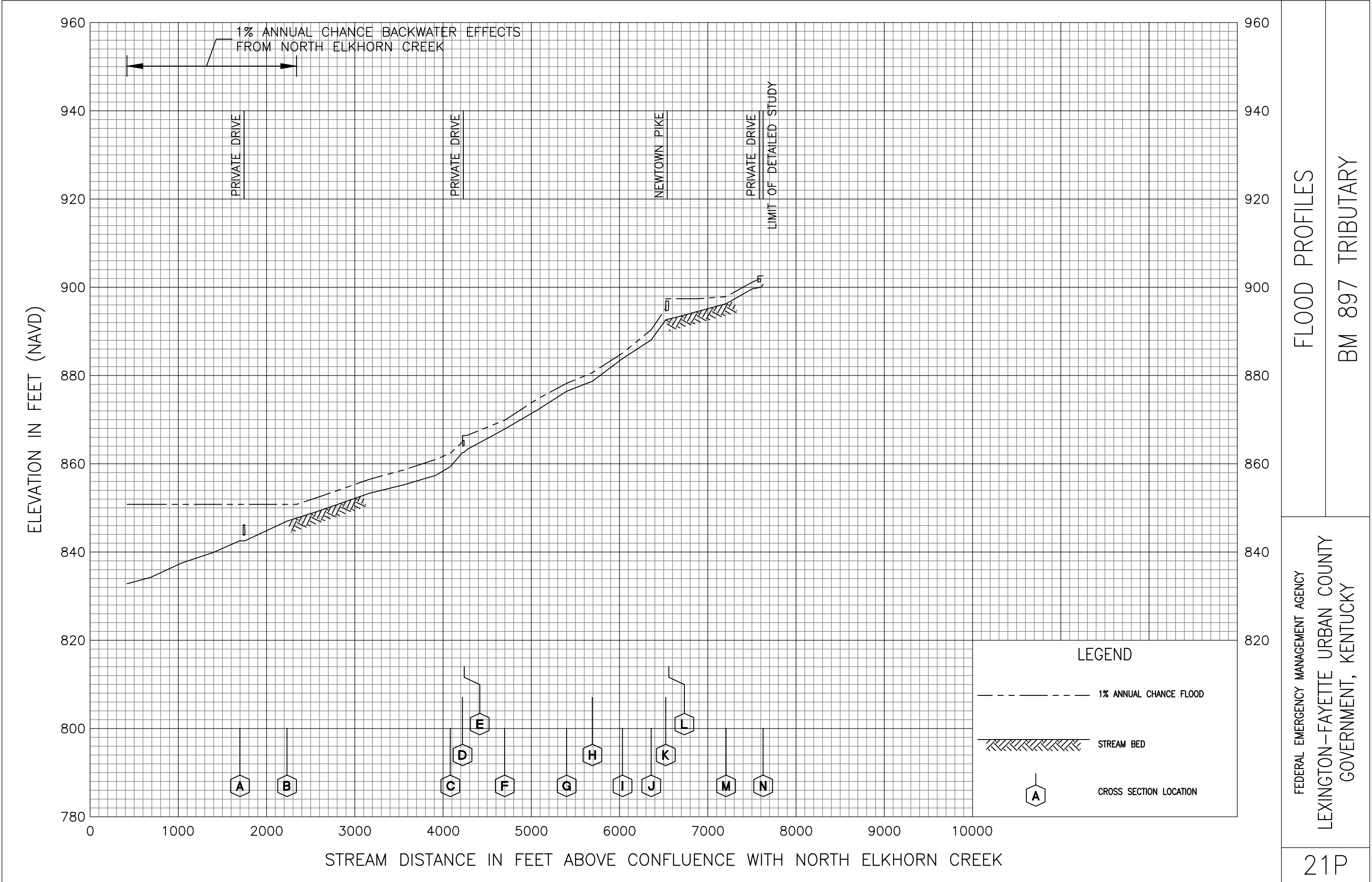
FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY



FLOOD PROFILES
BIG ELM TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY

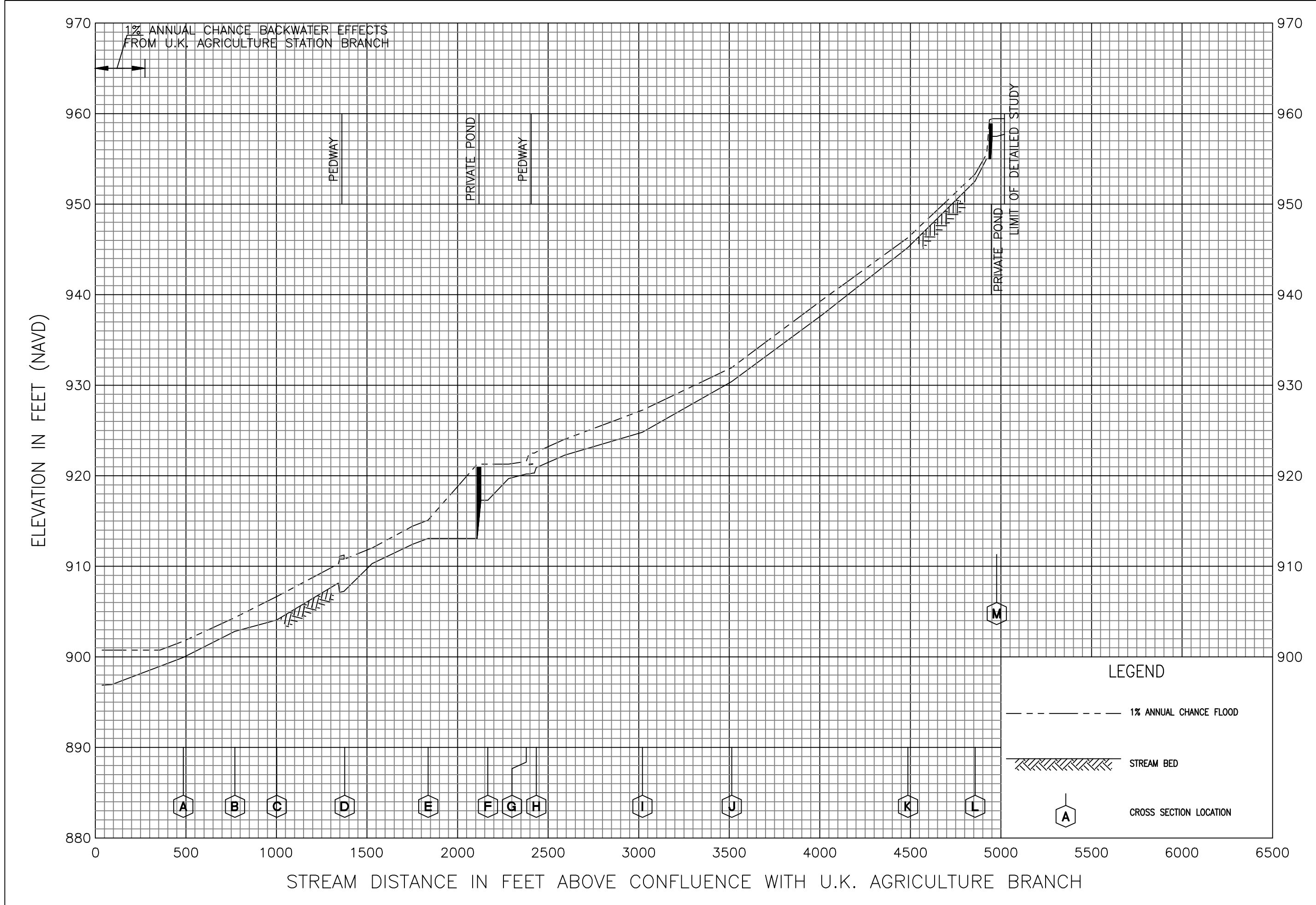


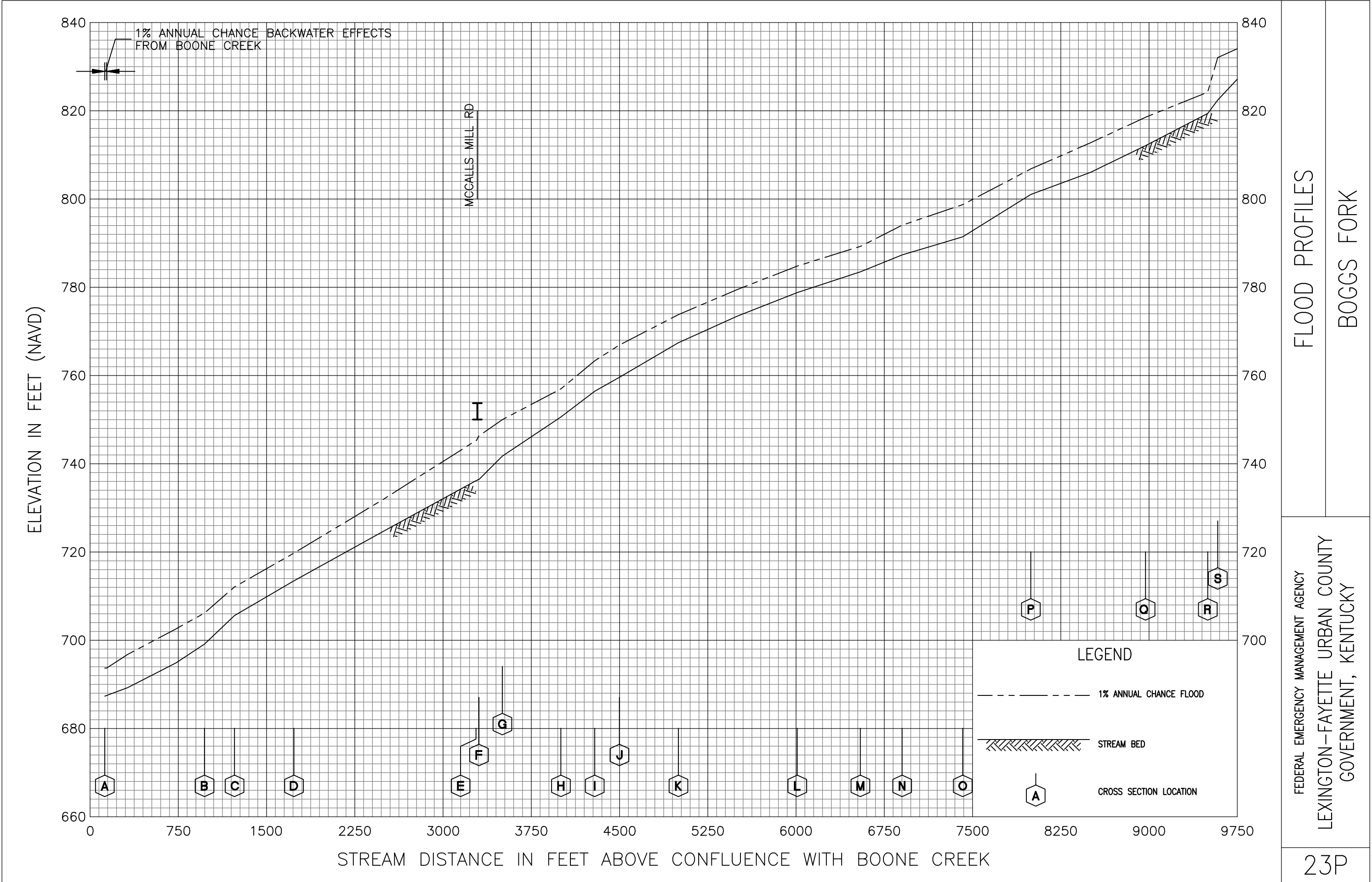


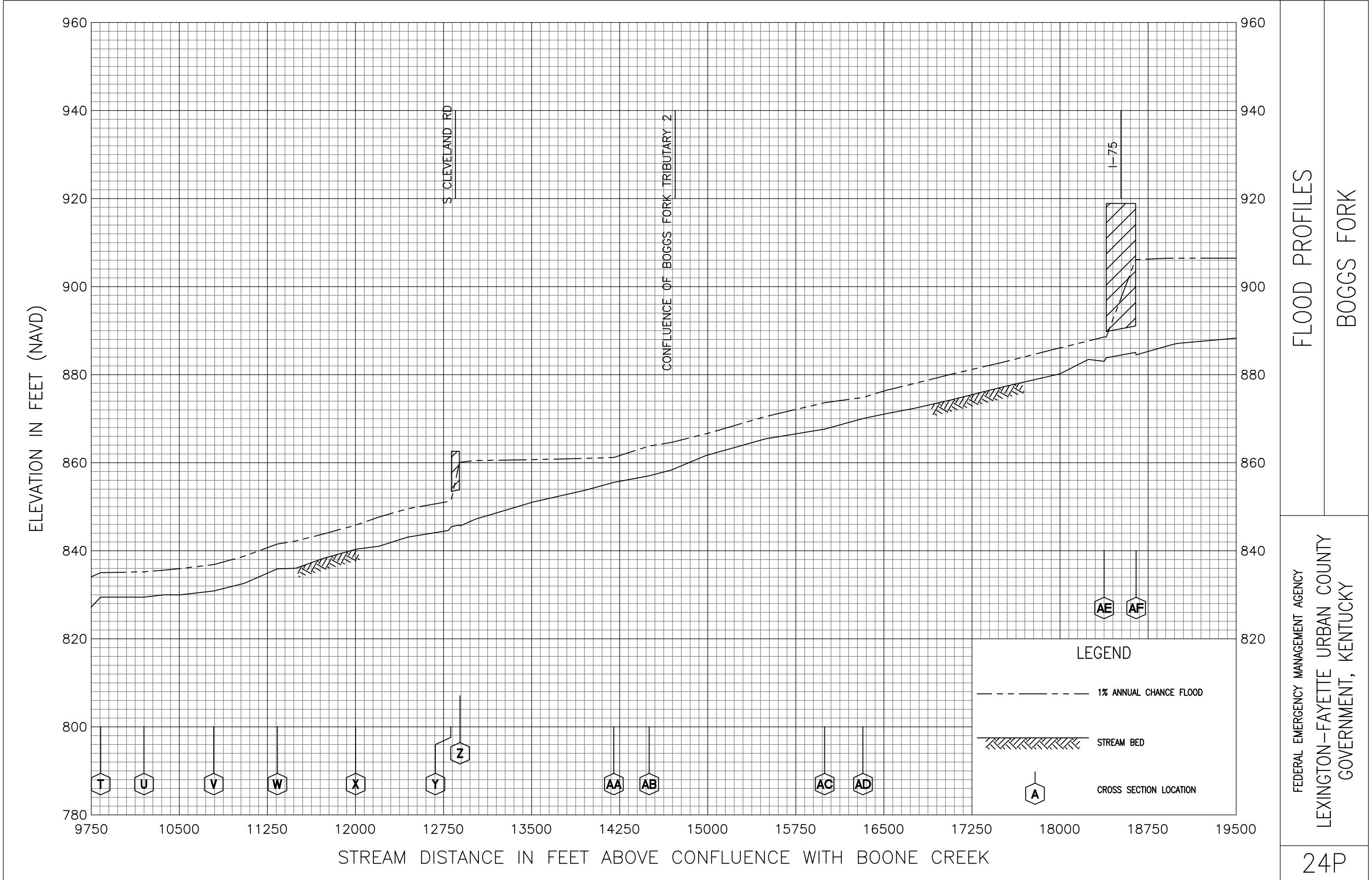
FLOOD PROFILES

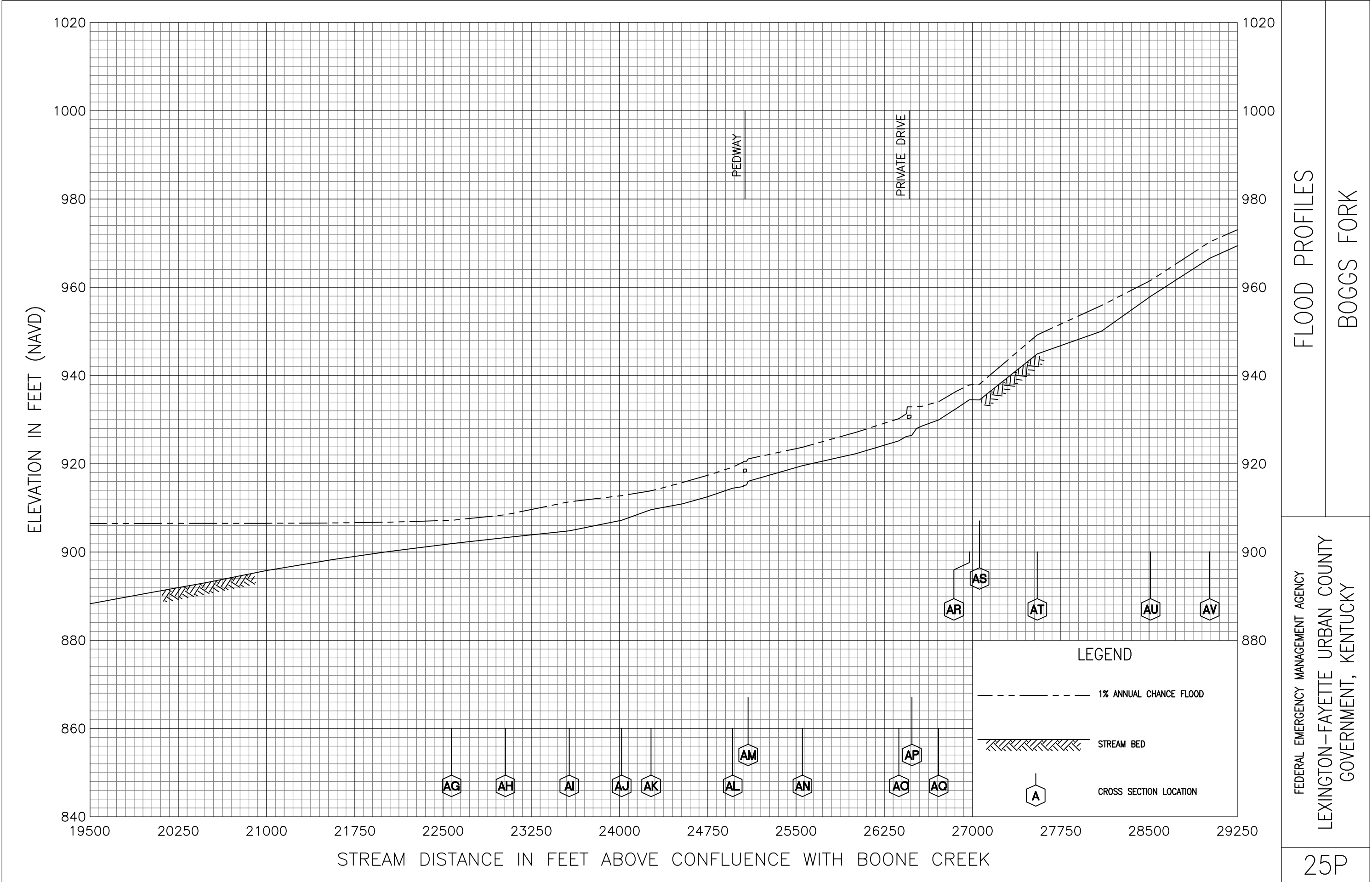
BM 897 TRIBUTARY

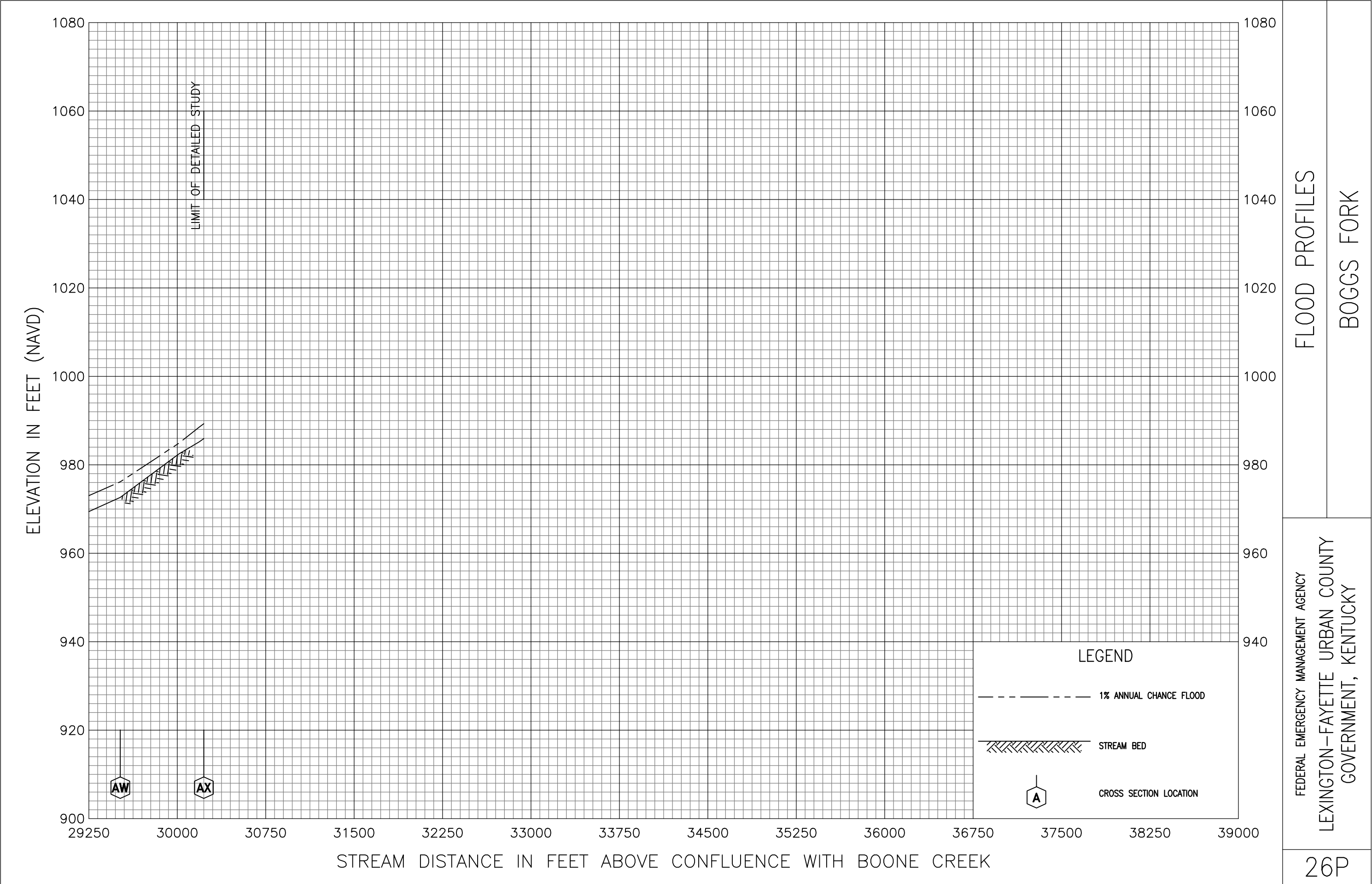
FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY







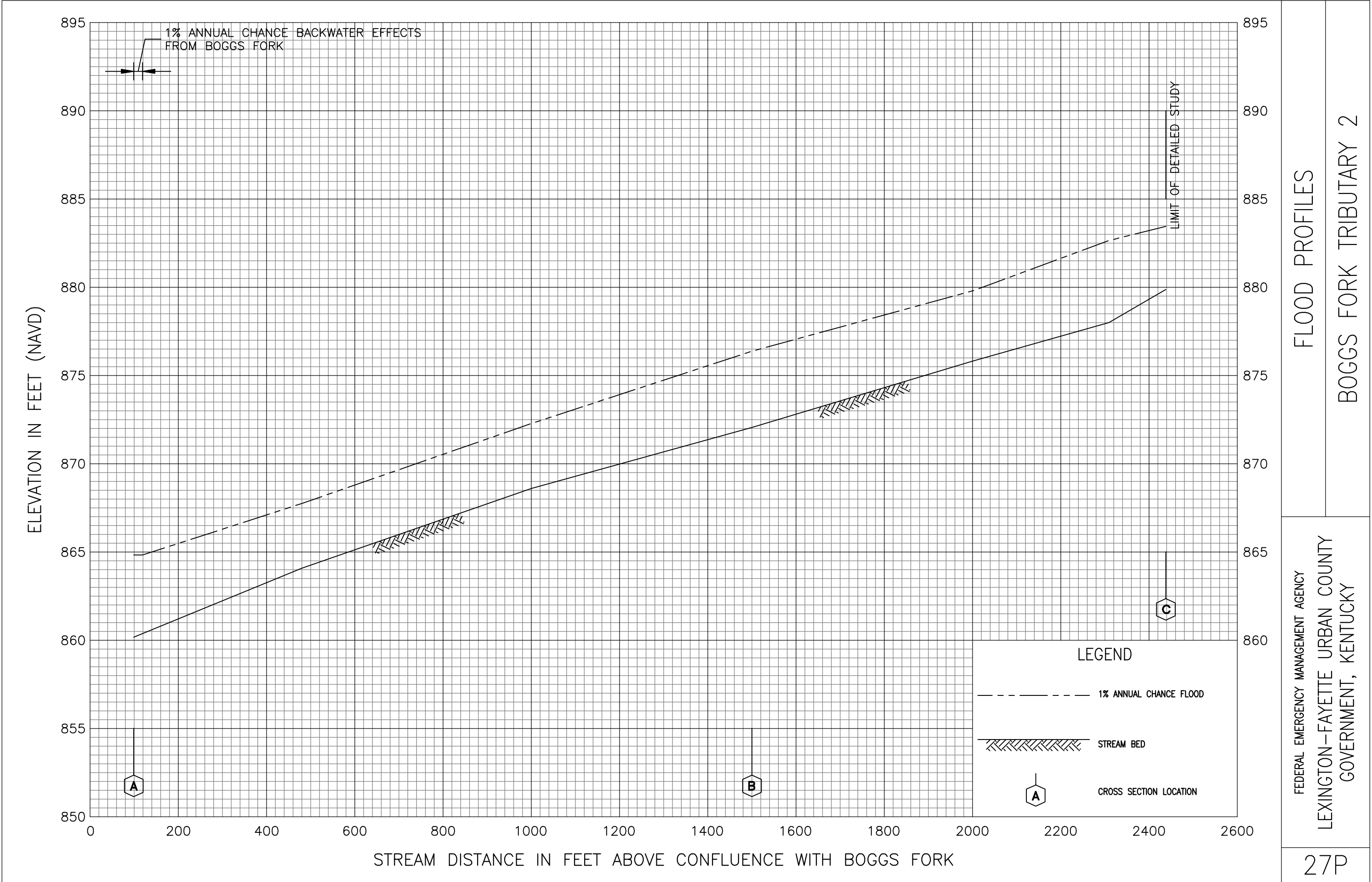


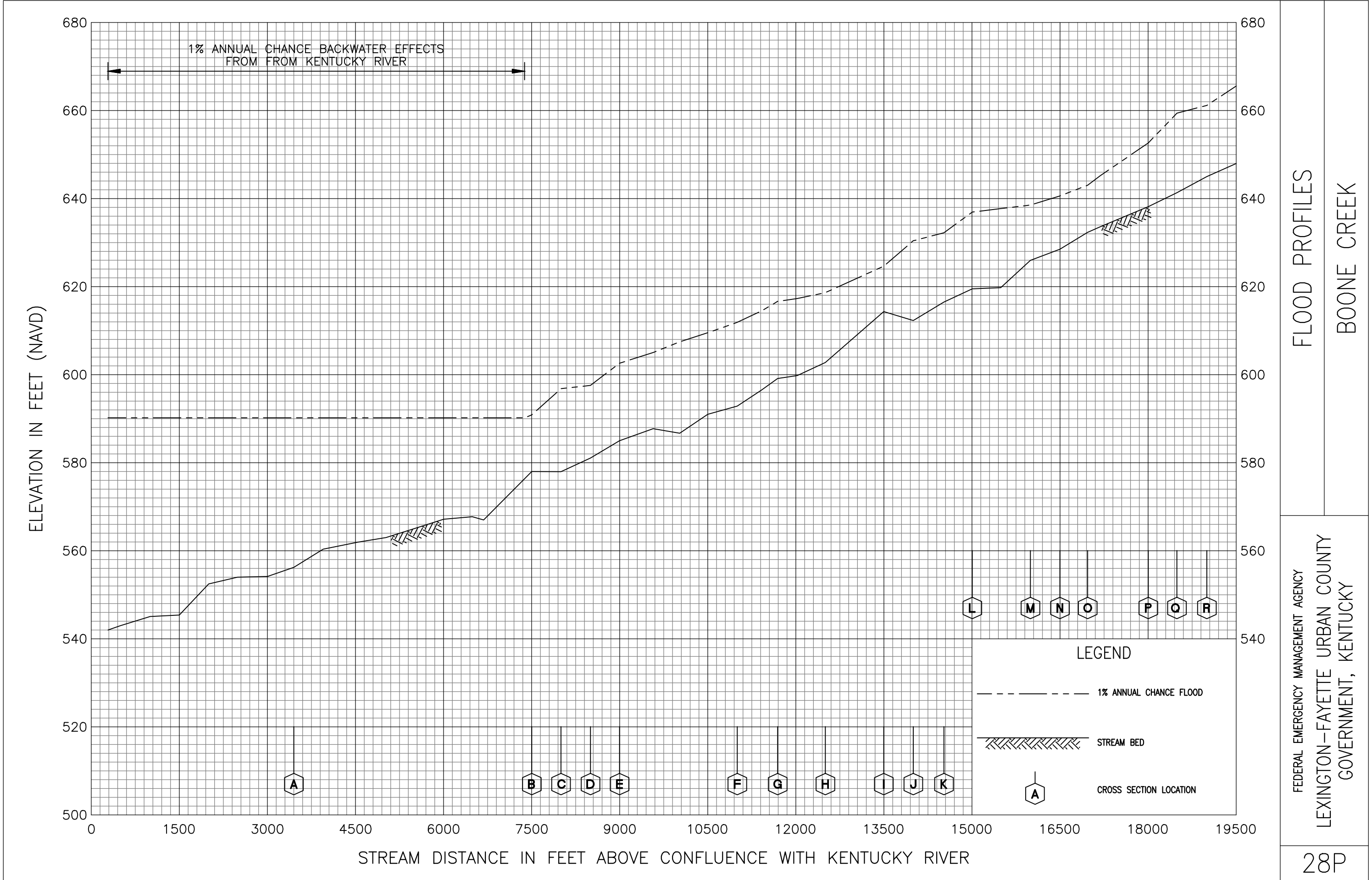


FLOOD PROFILES

BOGGS FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY

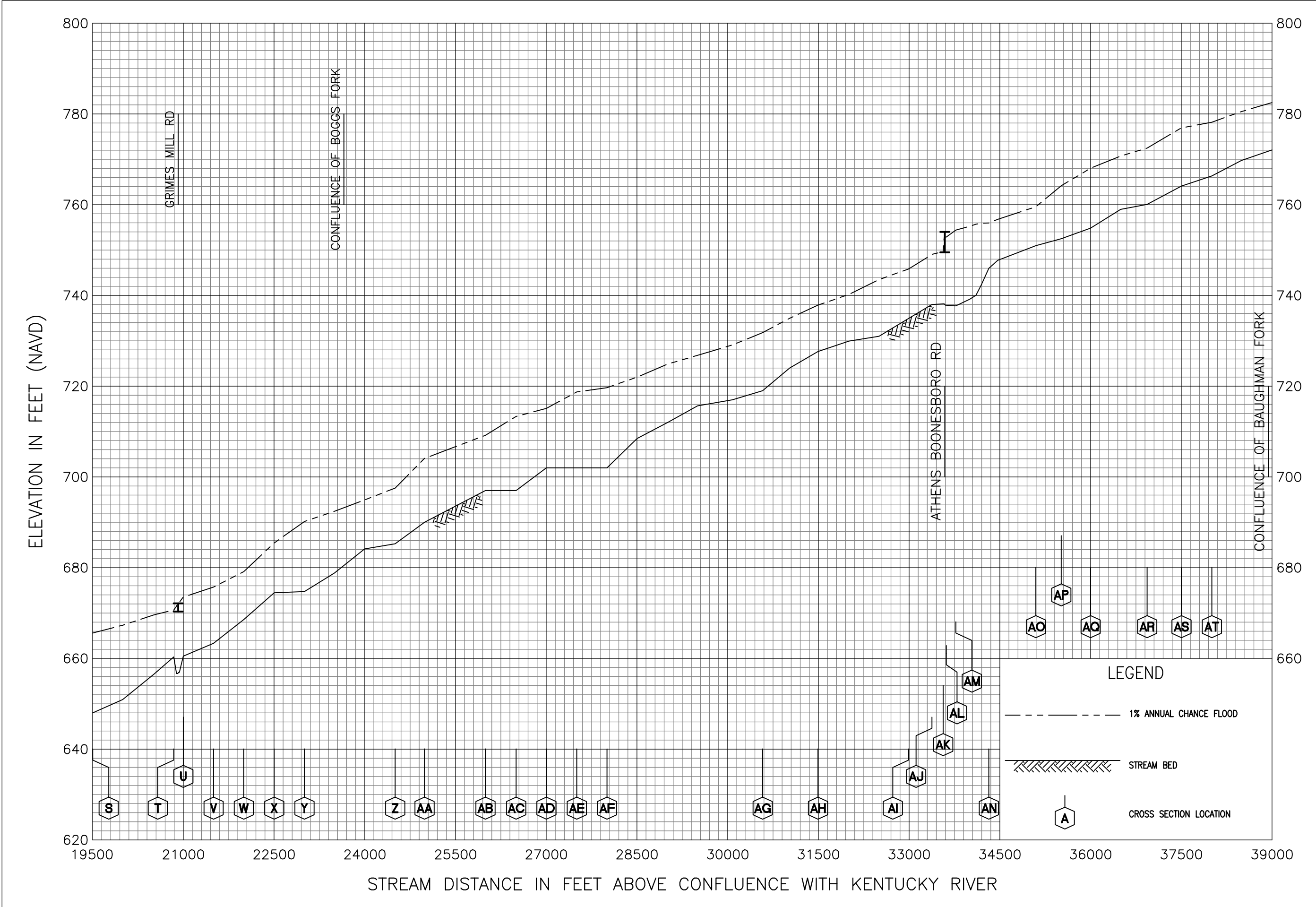


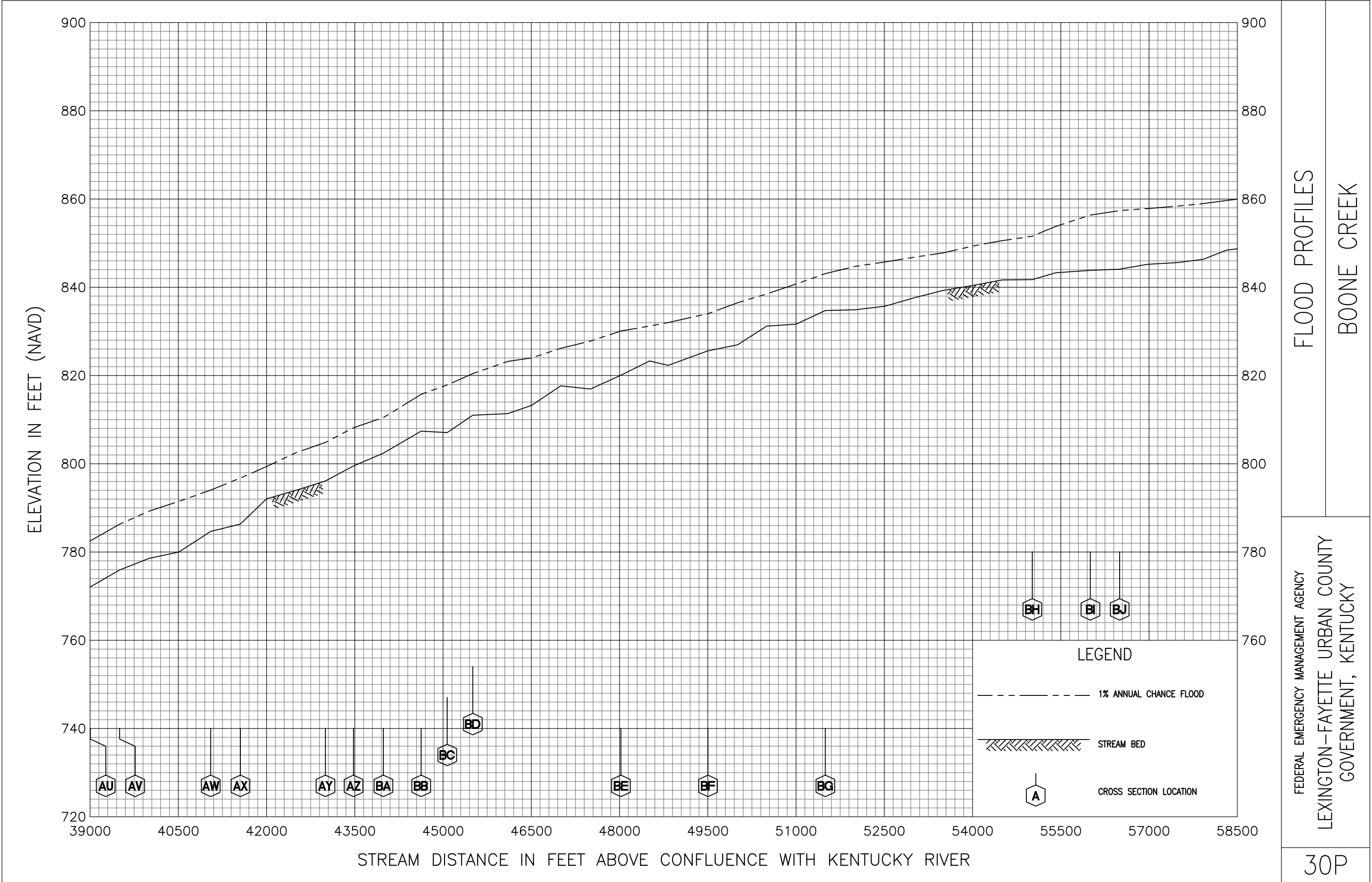


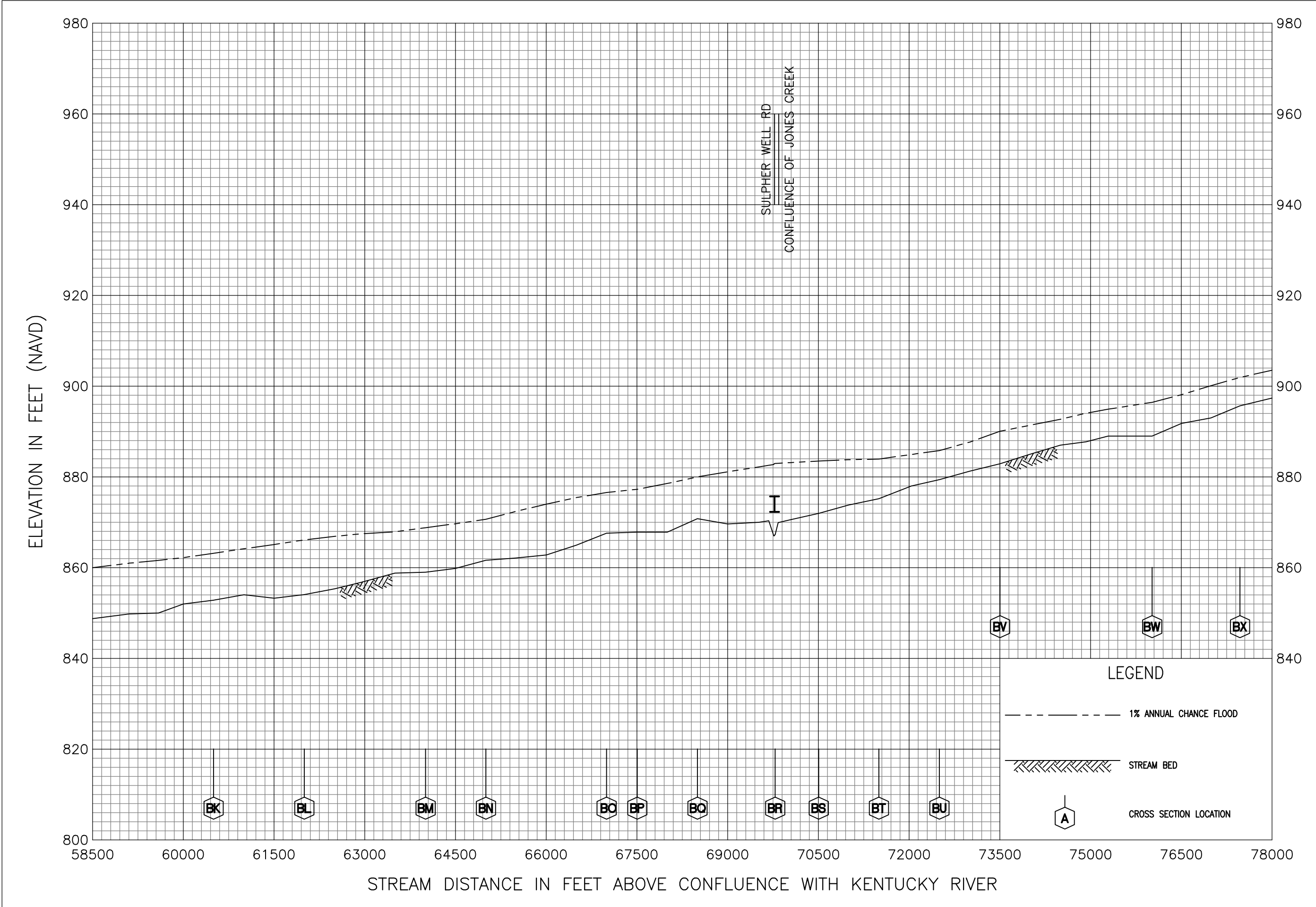
FLOOD PROFILES

BOONE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY



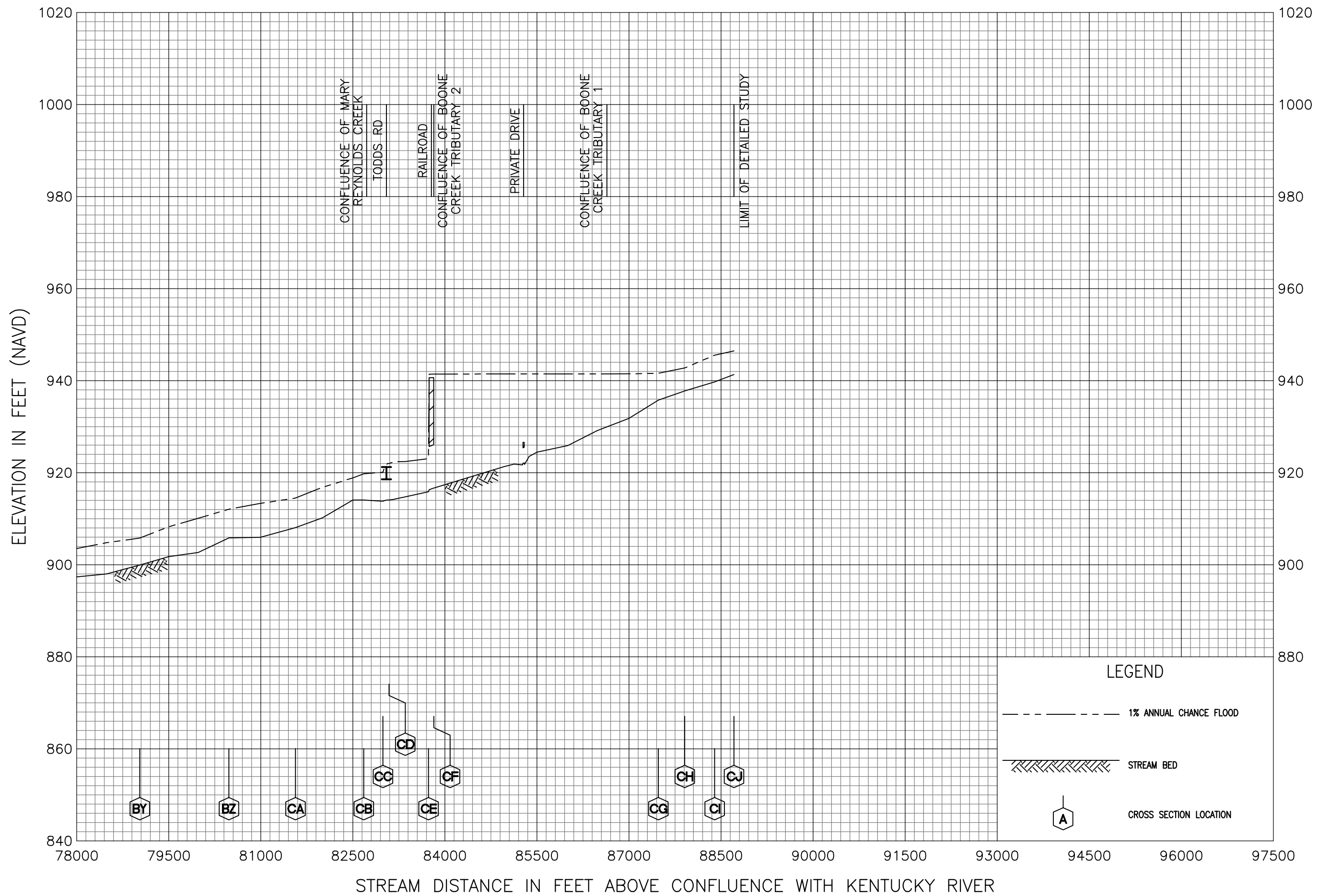


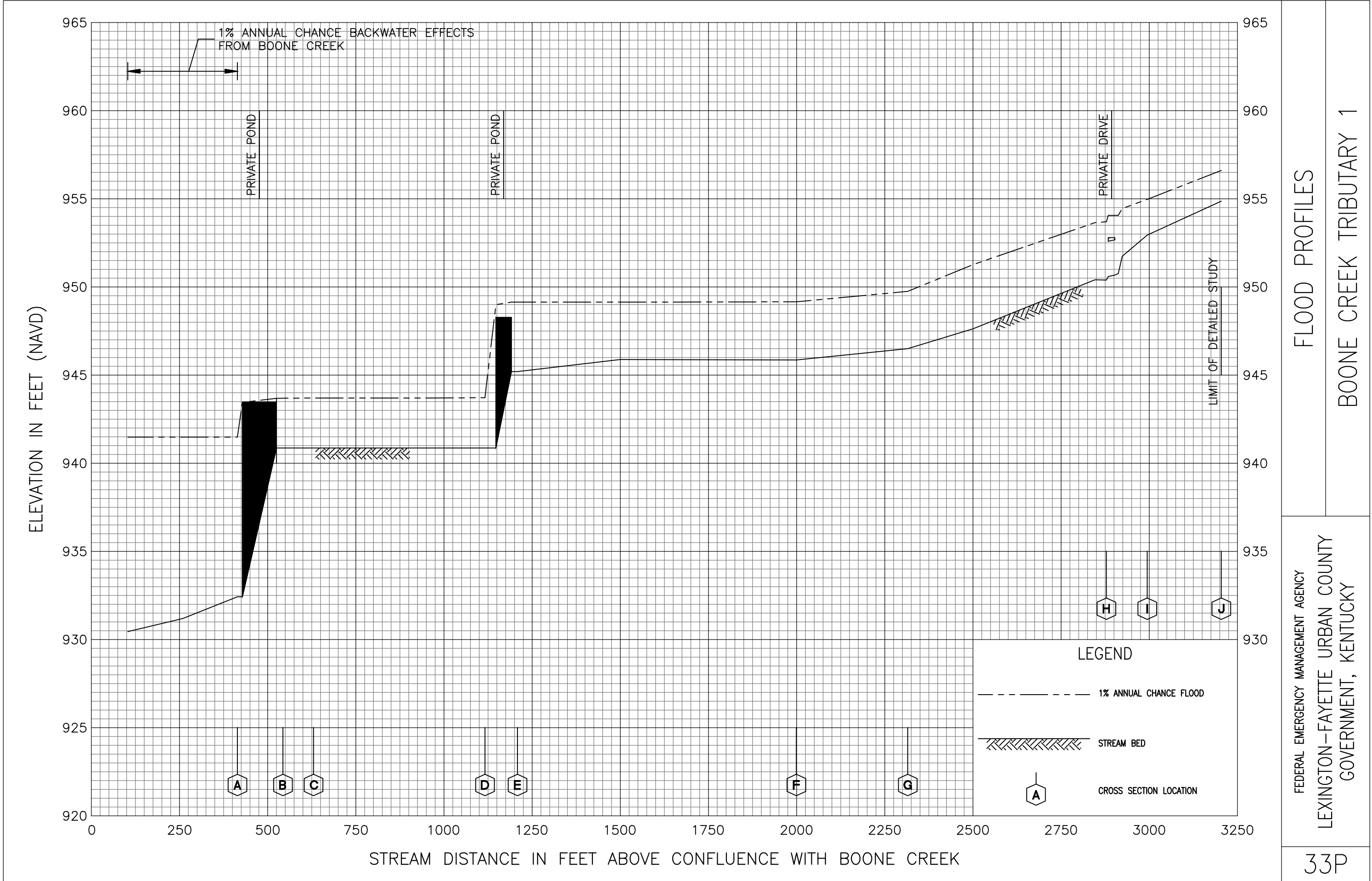


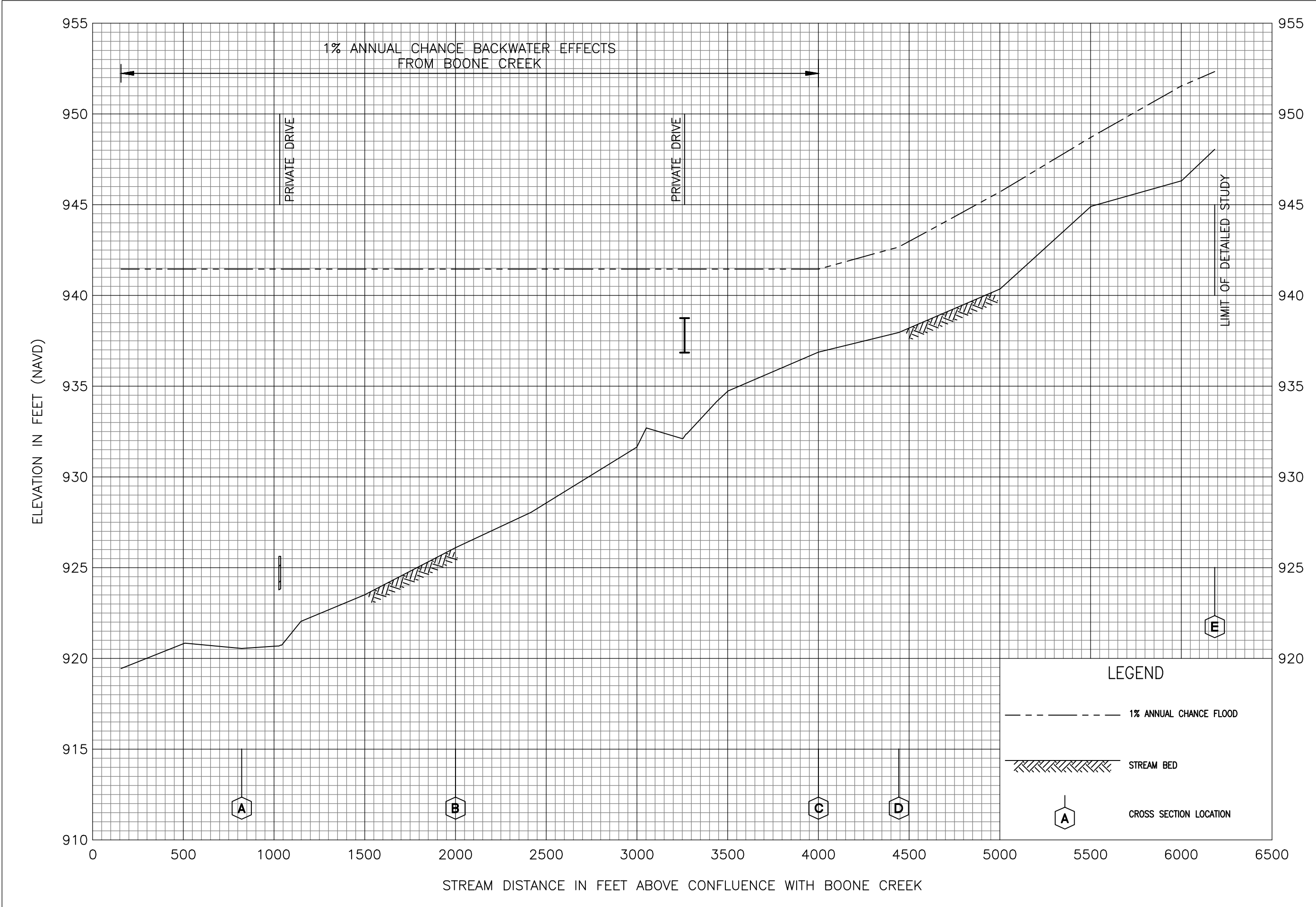
FLOOD PROFILES

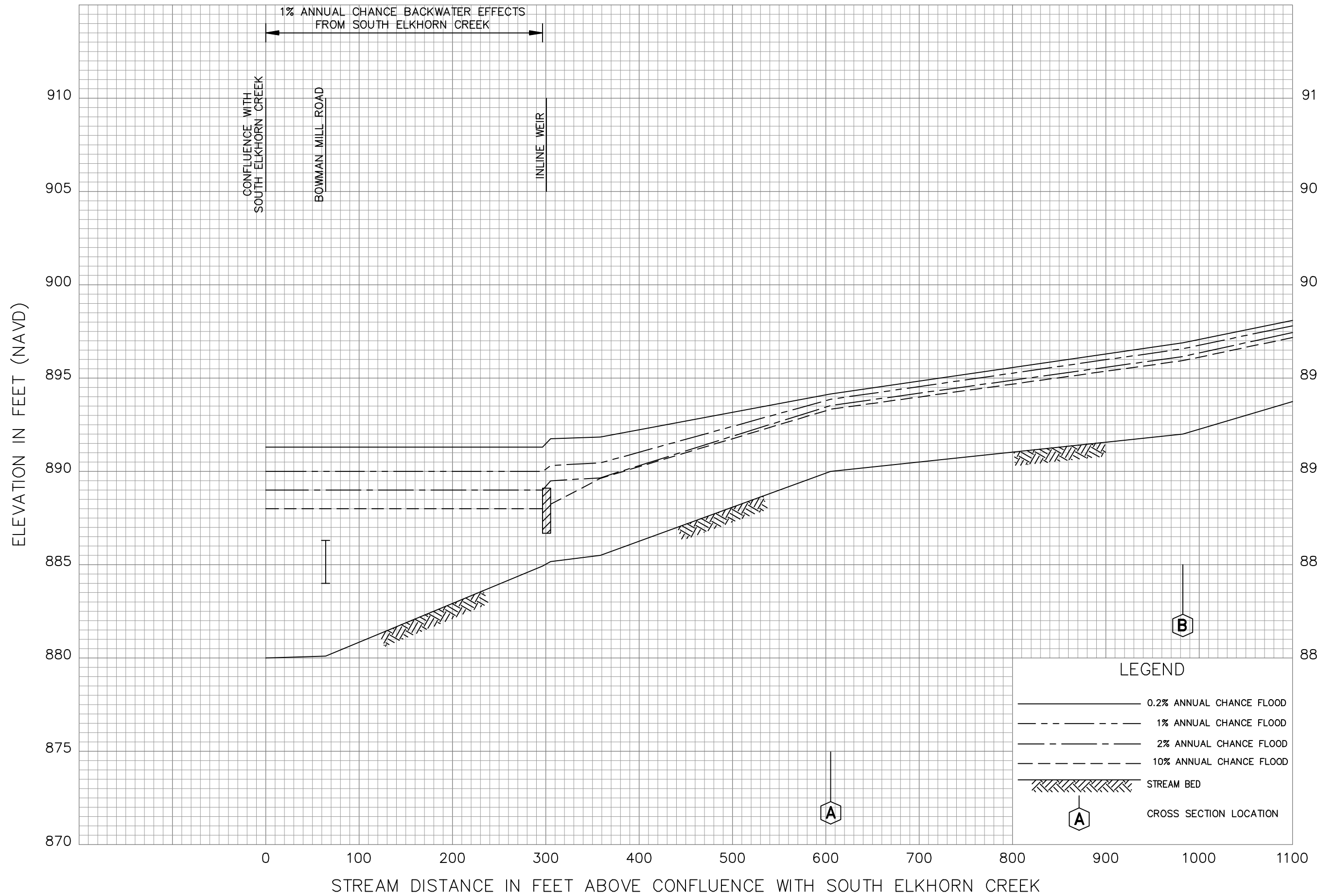
BOONE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY





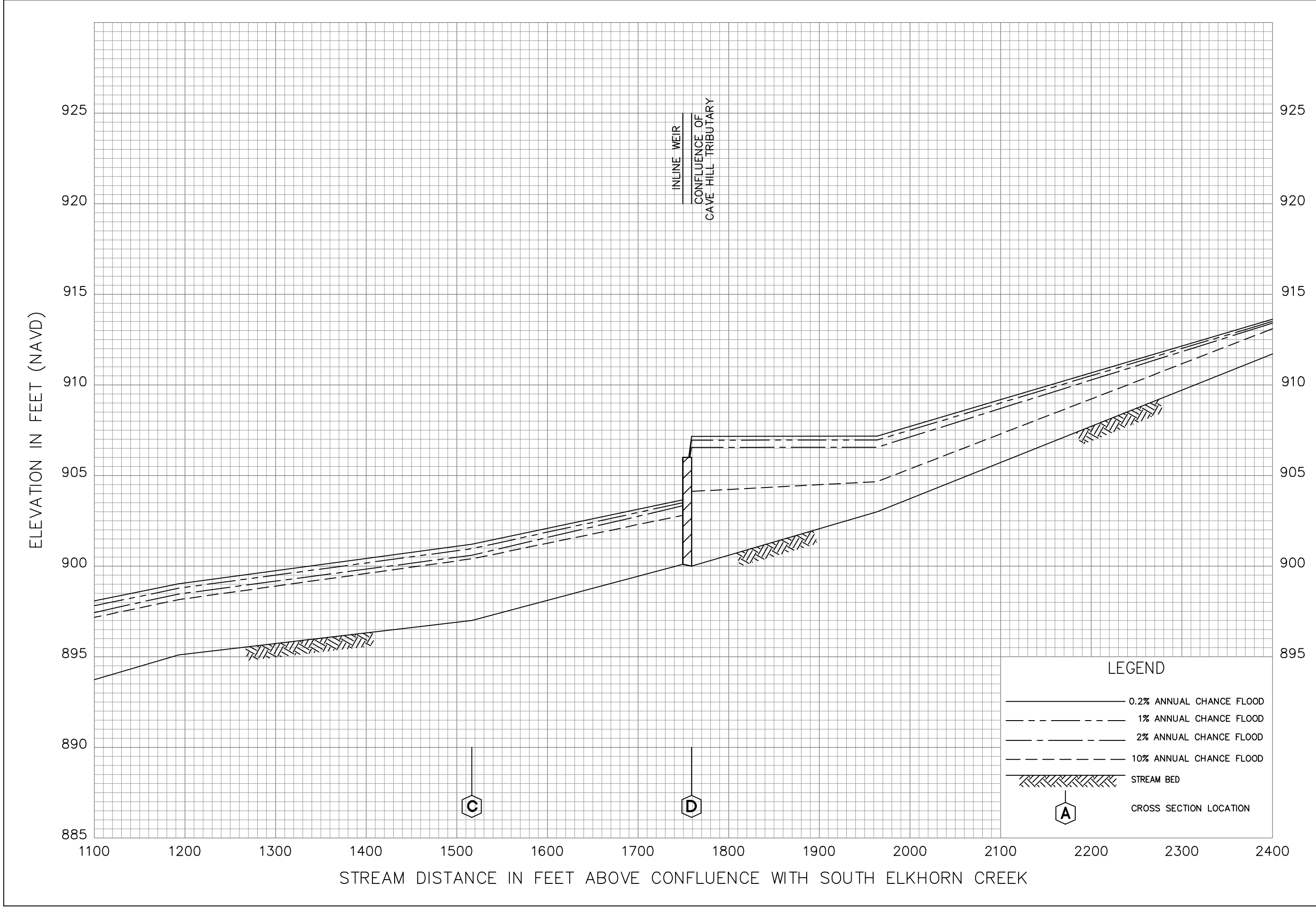


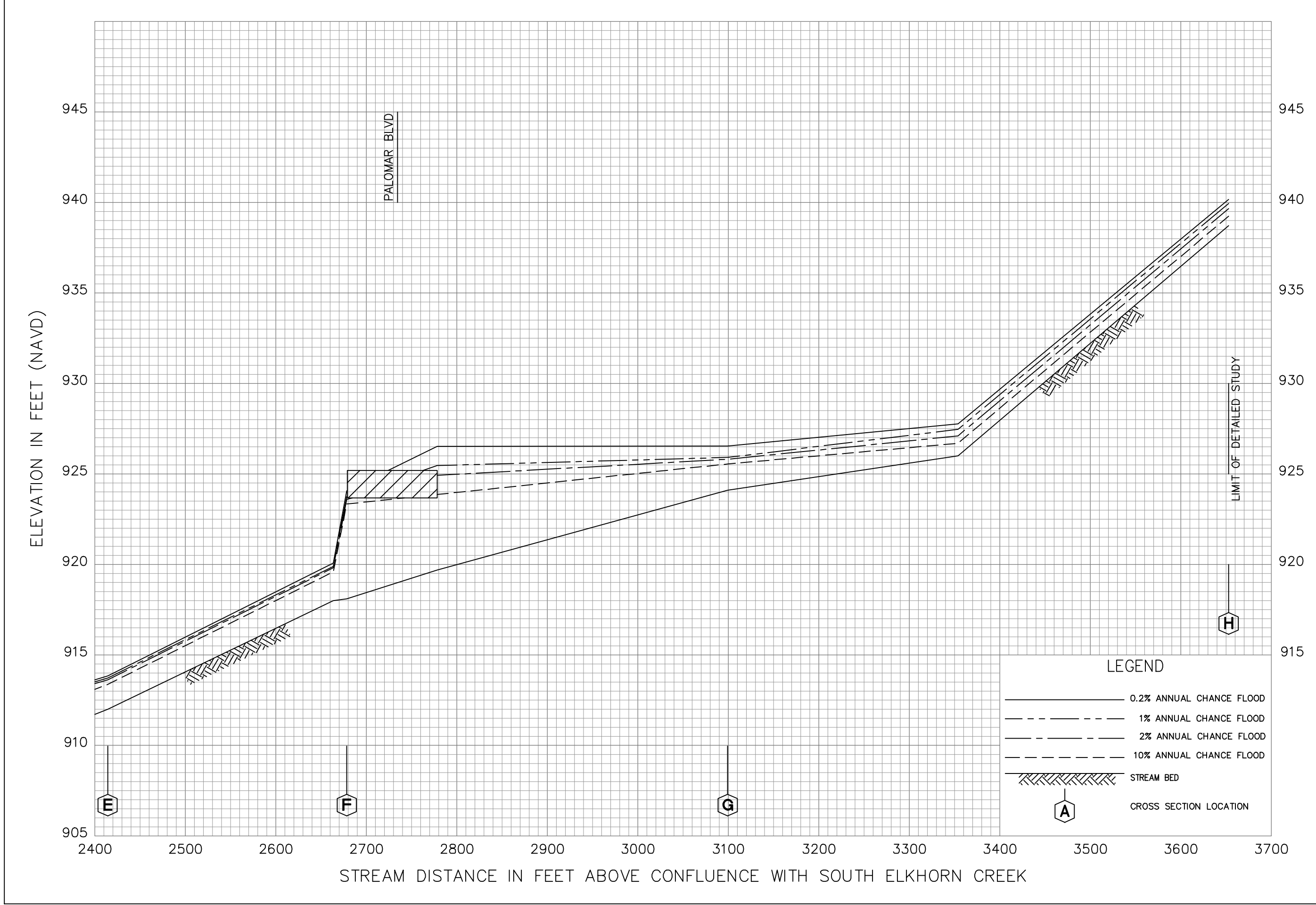


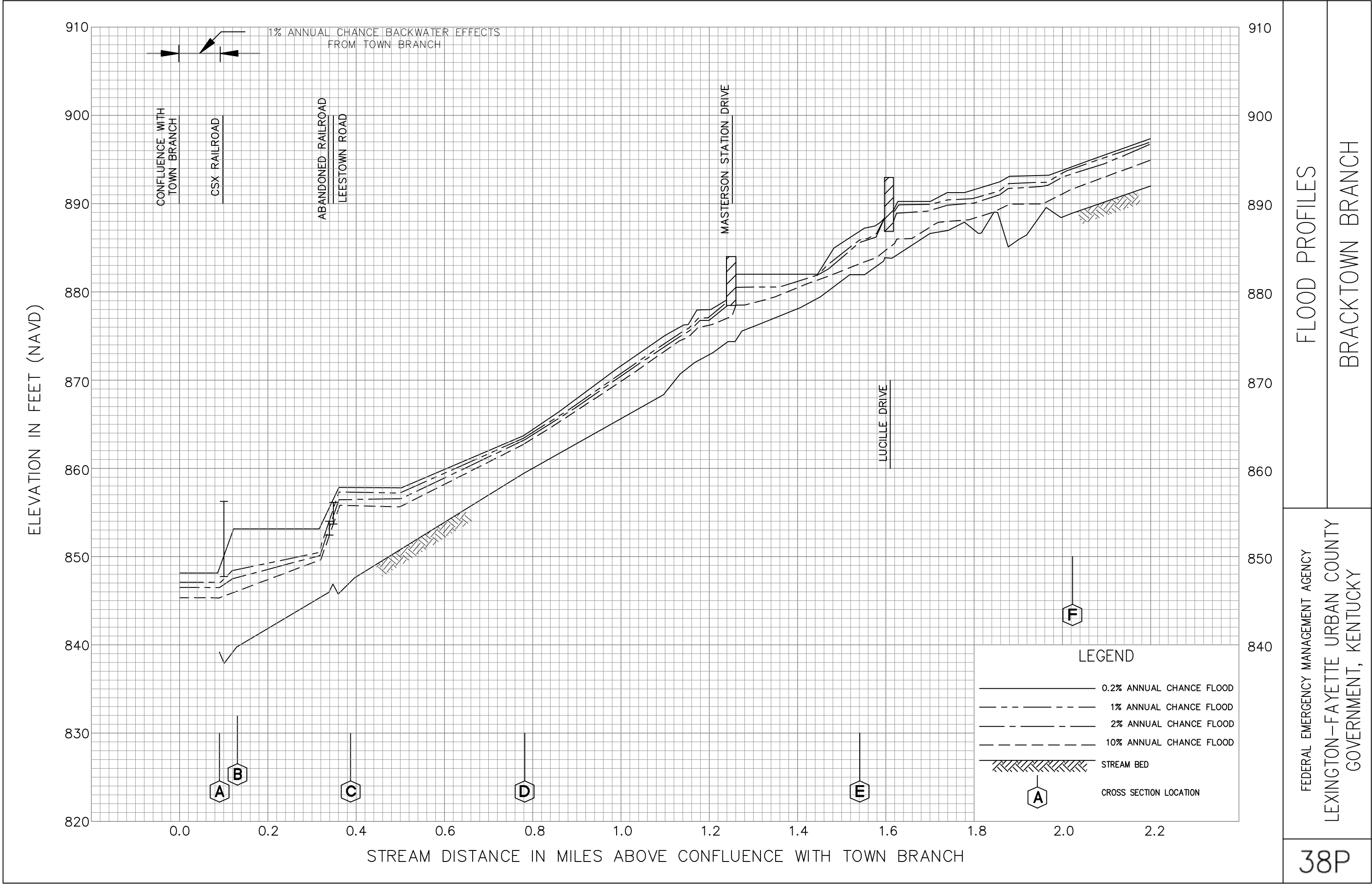
FLOOD PROFILES

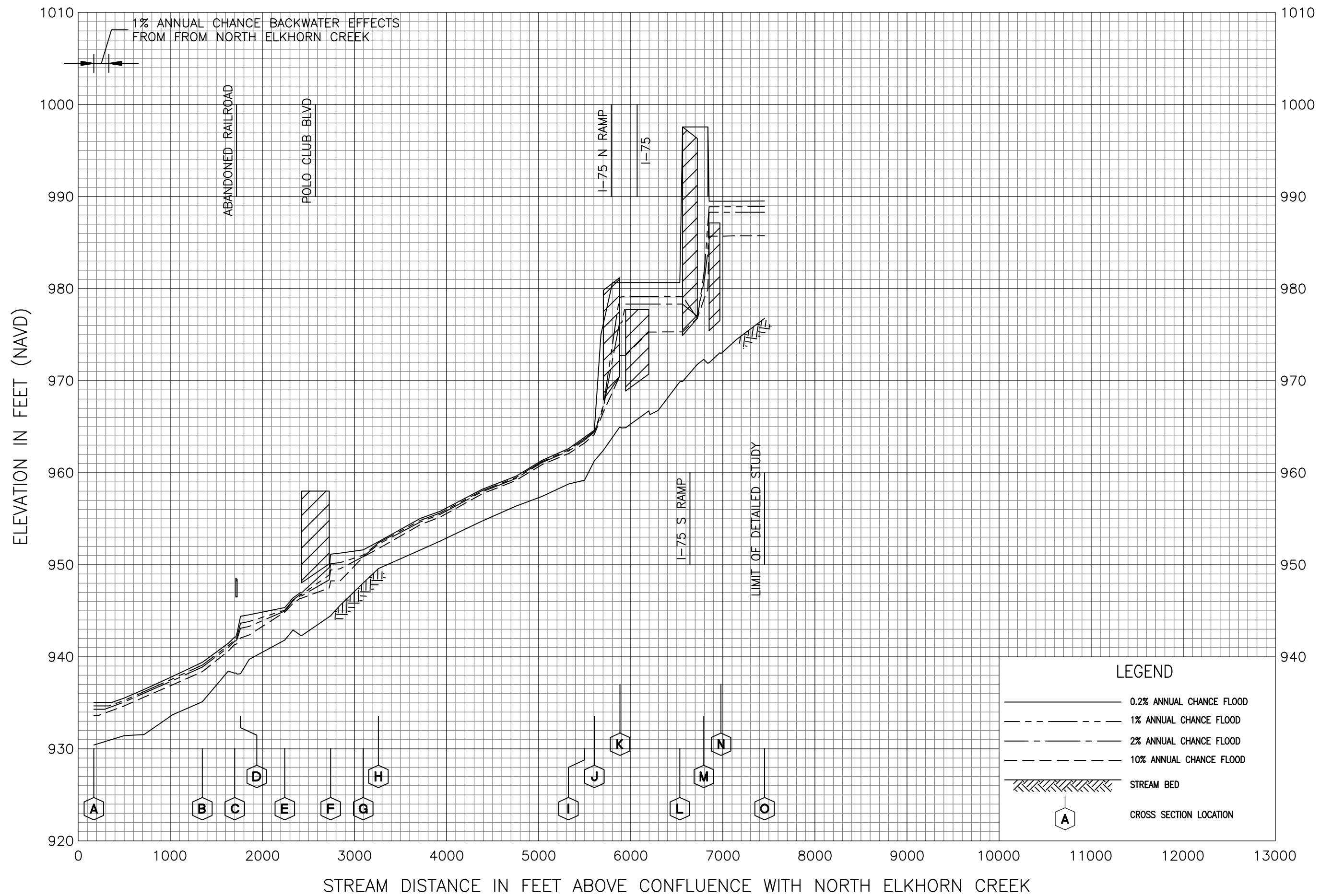
BOWMAN MILL TRIBUTARY

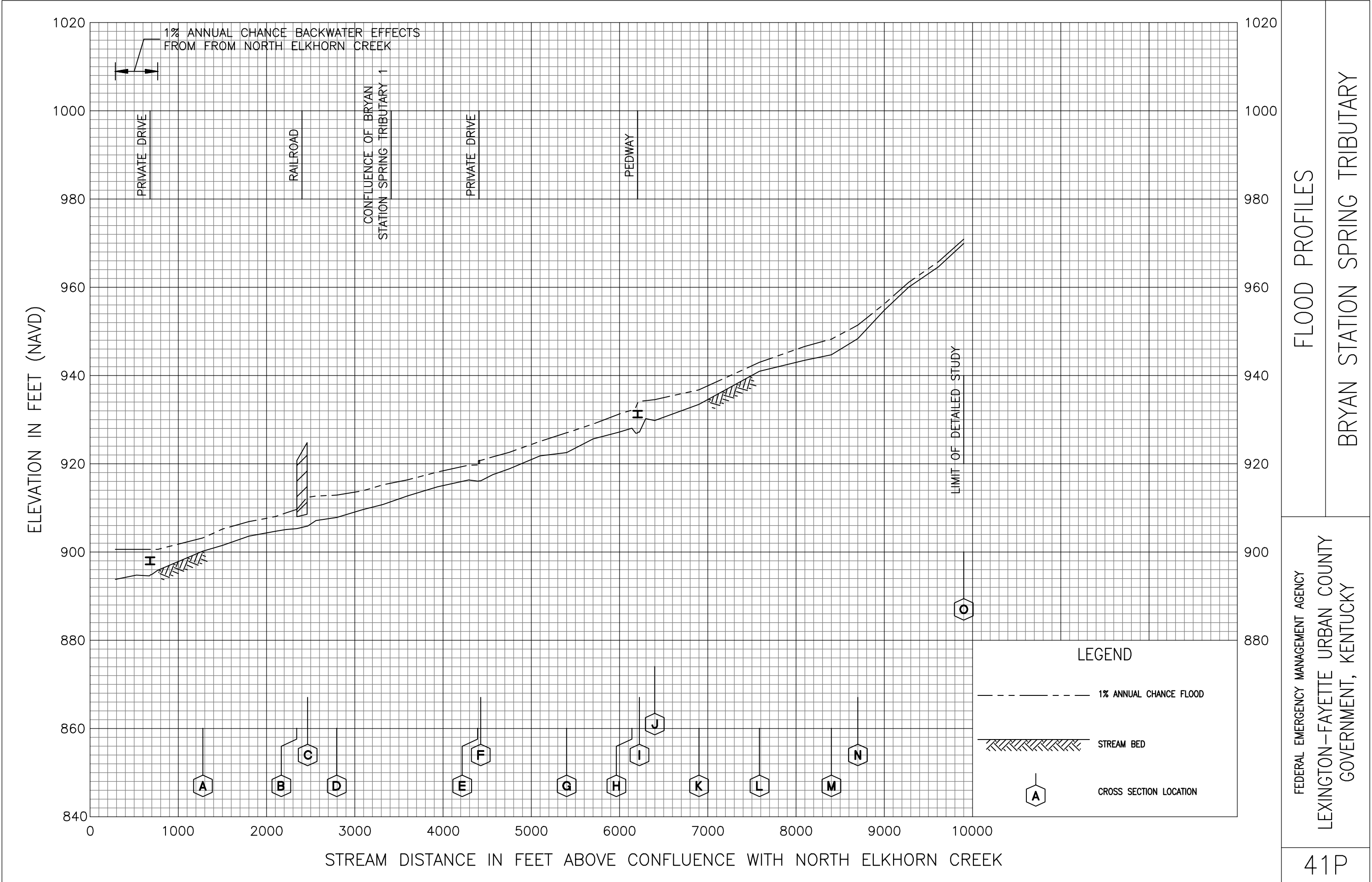
FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON—FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY

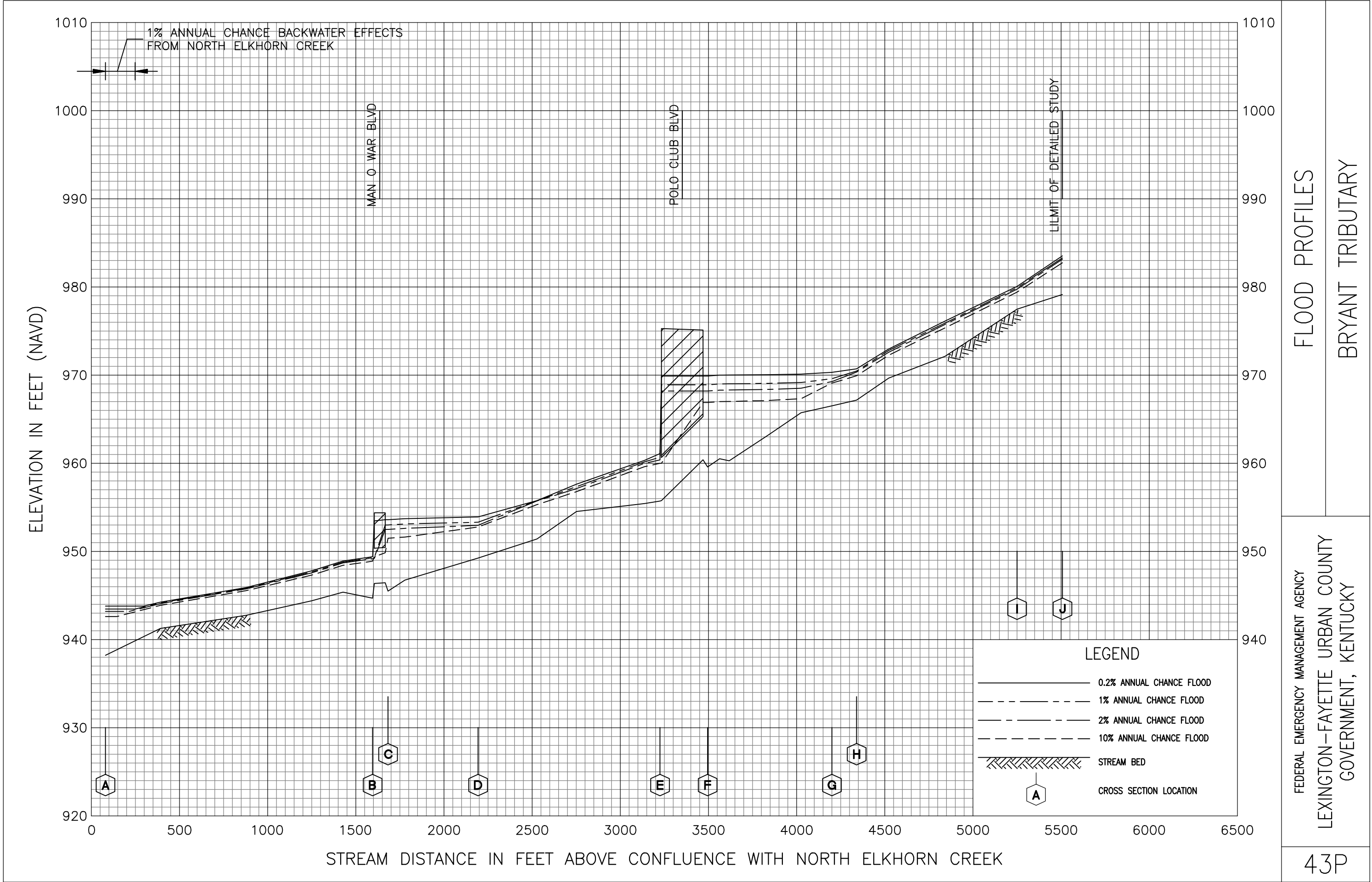


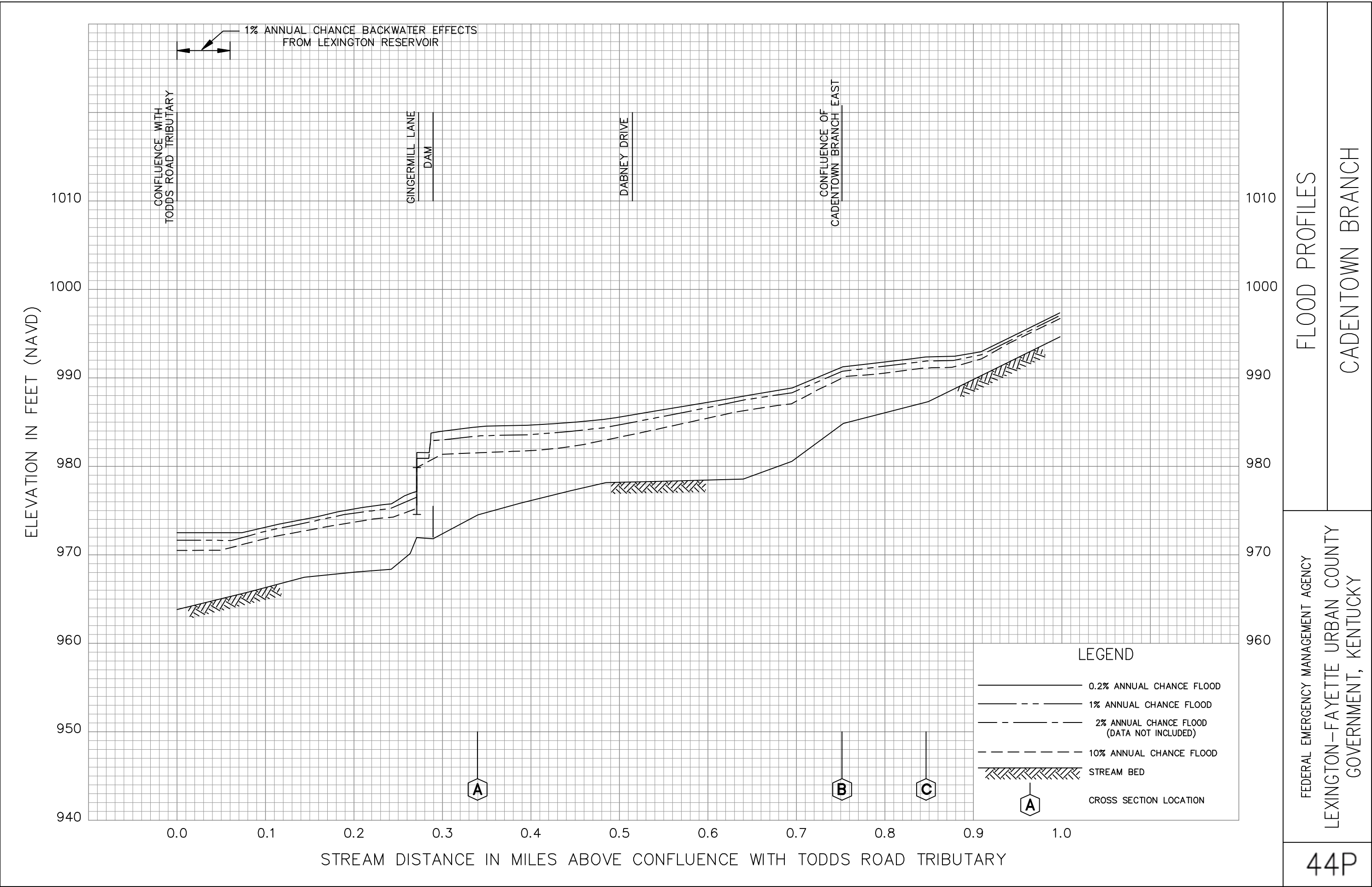


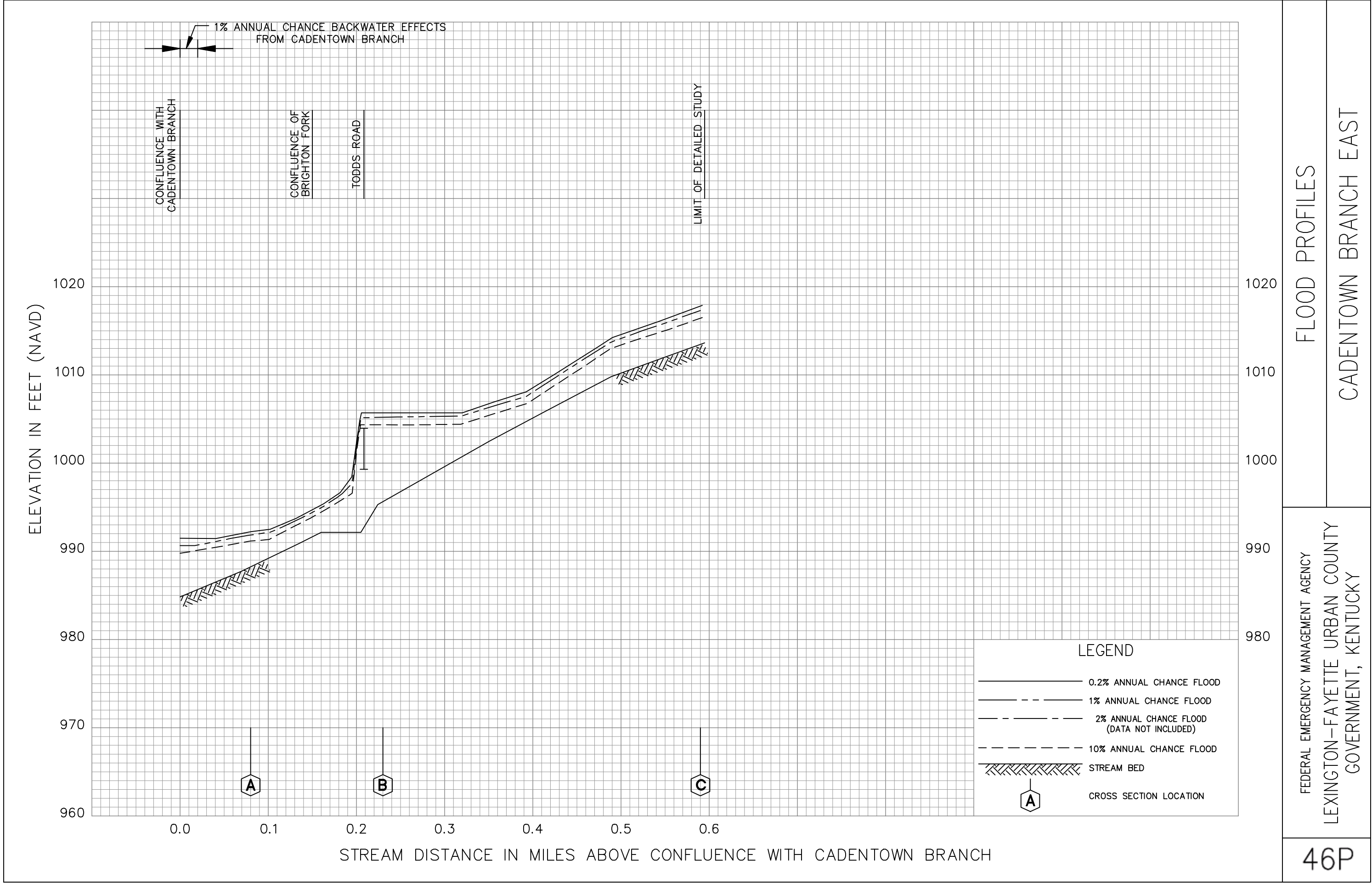


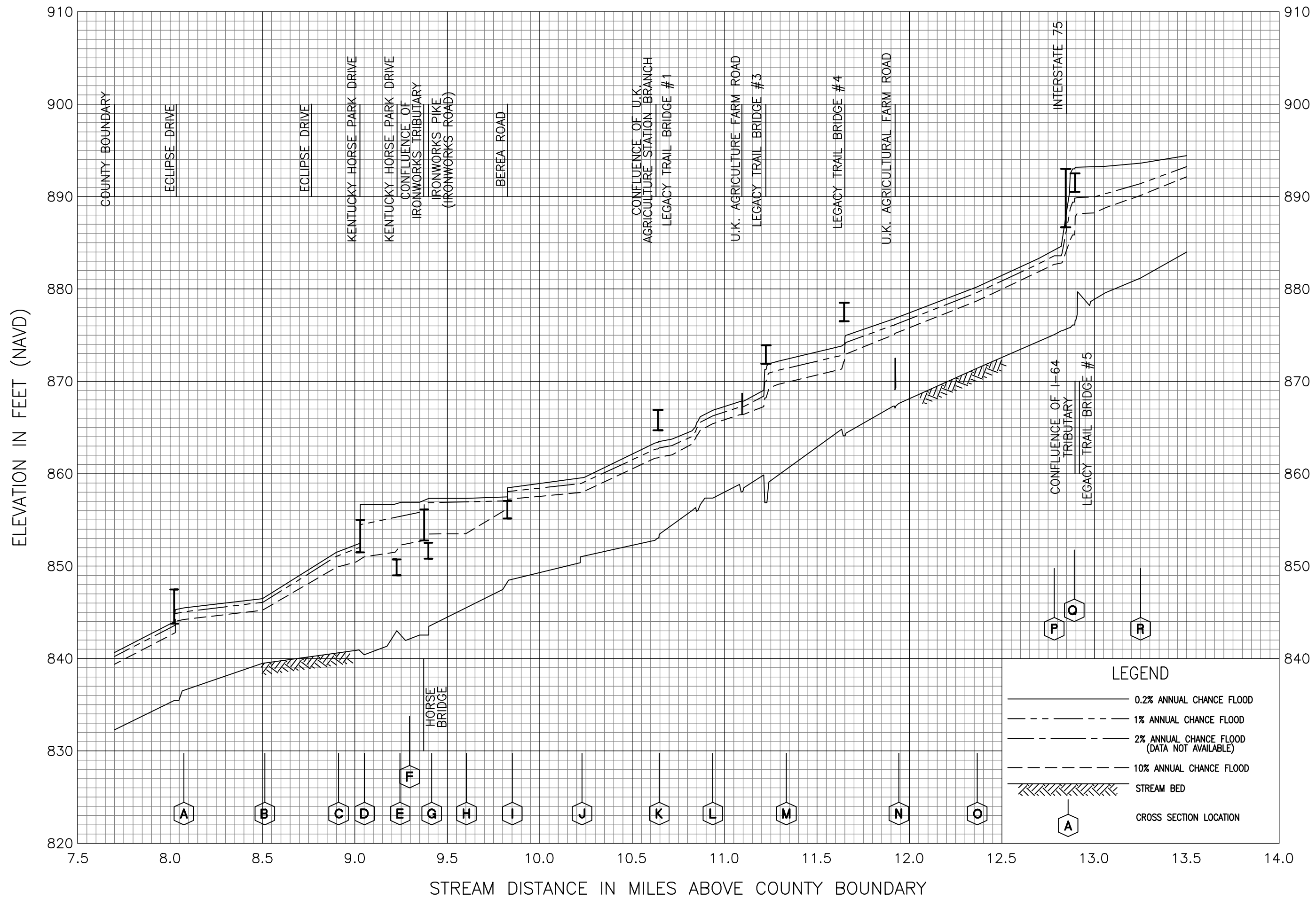










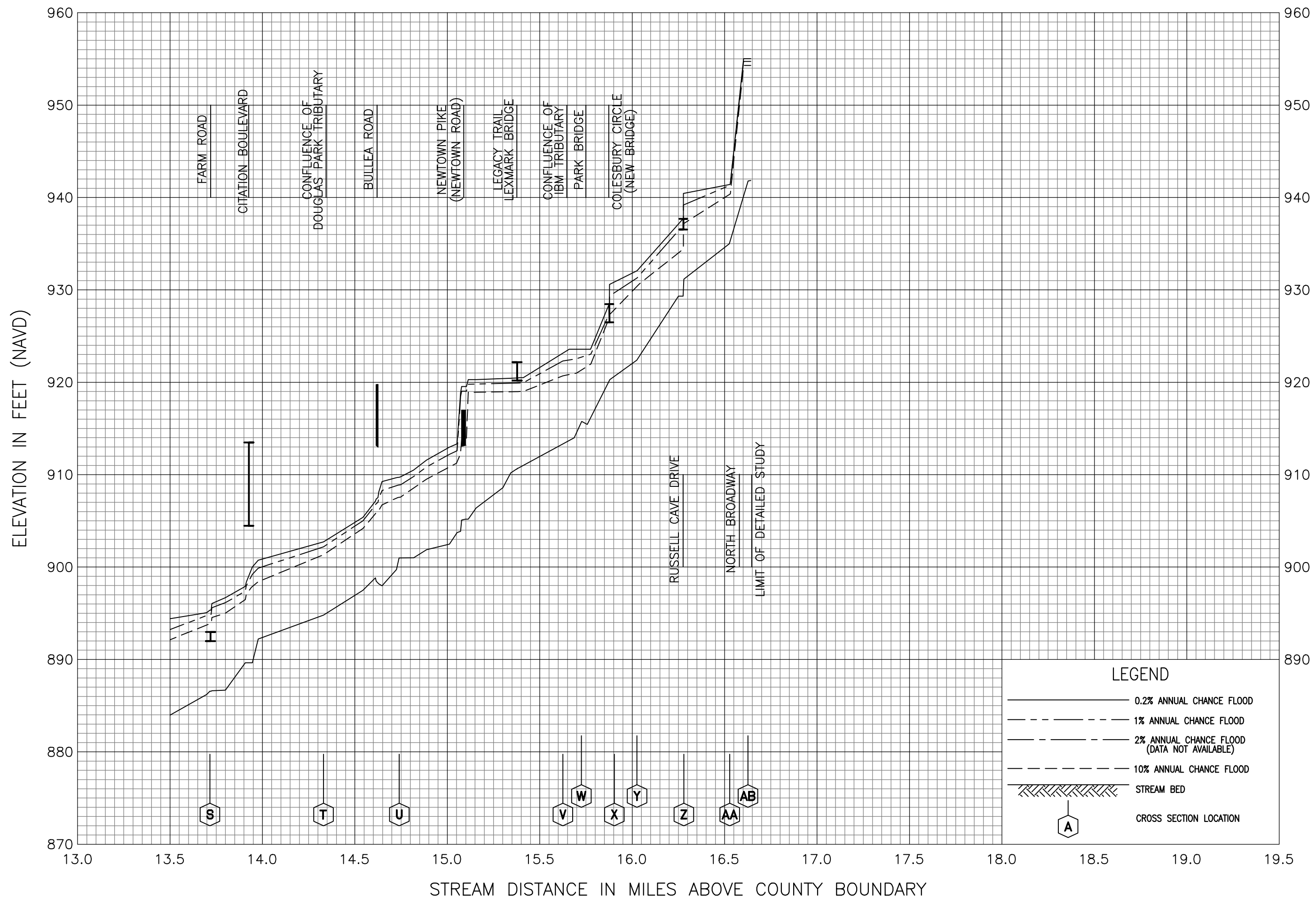


FEDERAL EMERGENCY MANAGEMENT AGENCY

LEXINGTON—FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY

FLOOD PROFILES

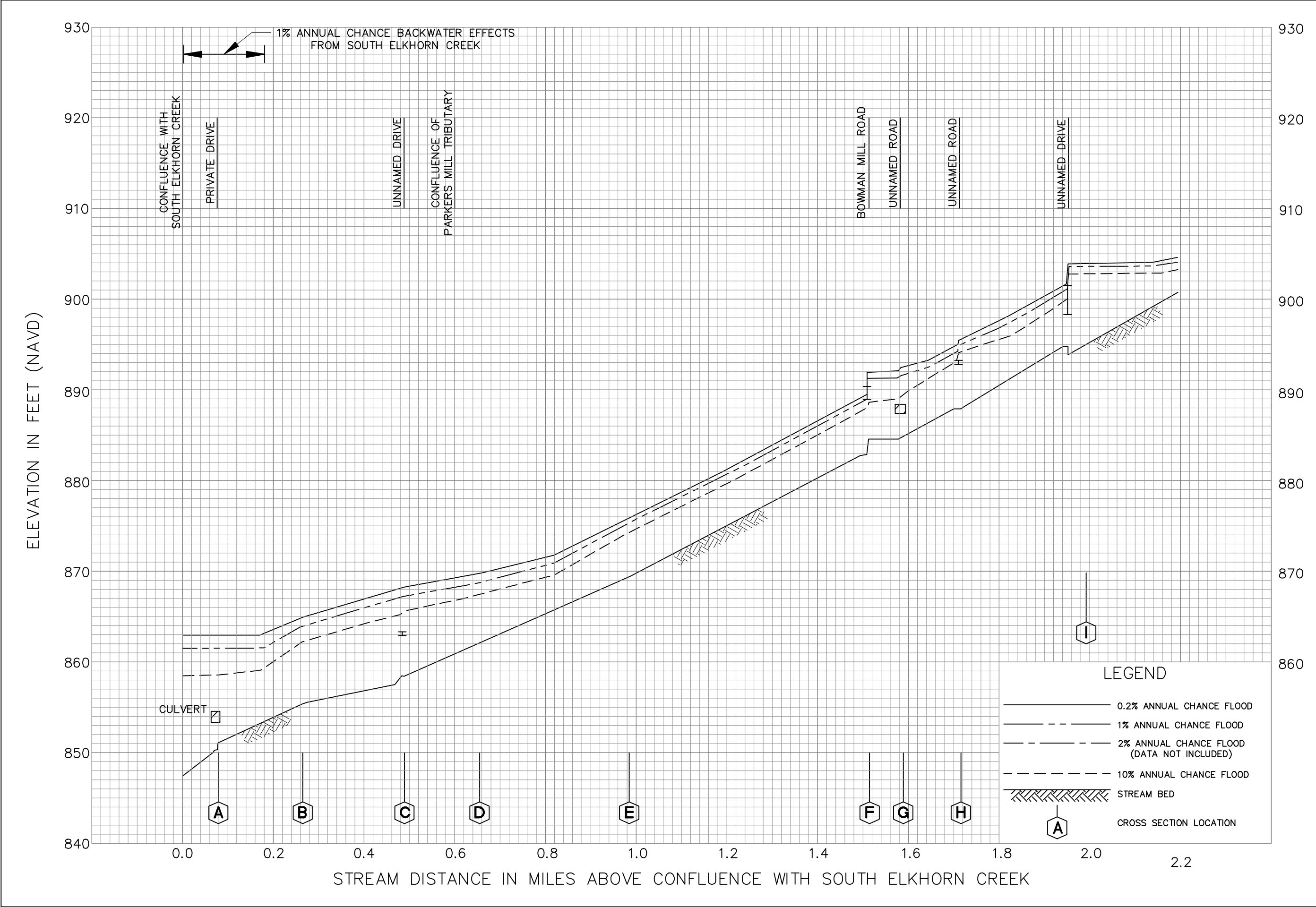
CANE RUN

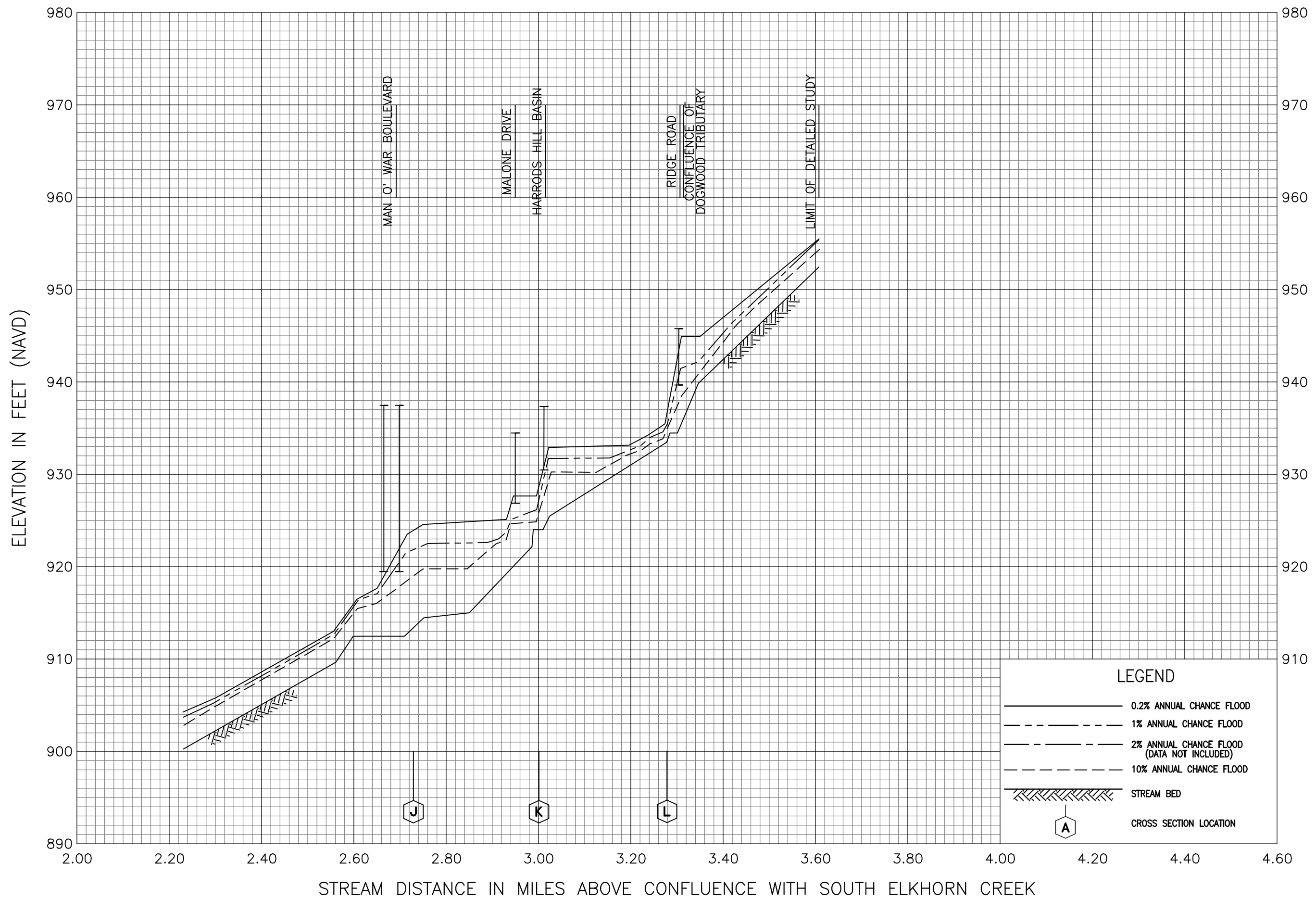


FLOOD PROFILES

CANE RUN

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY





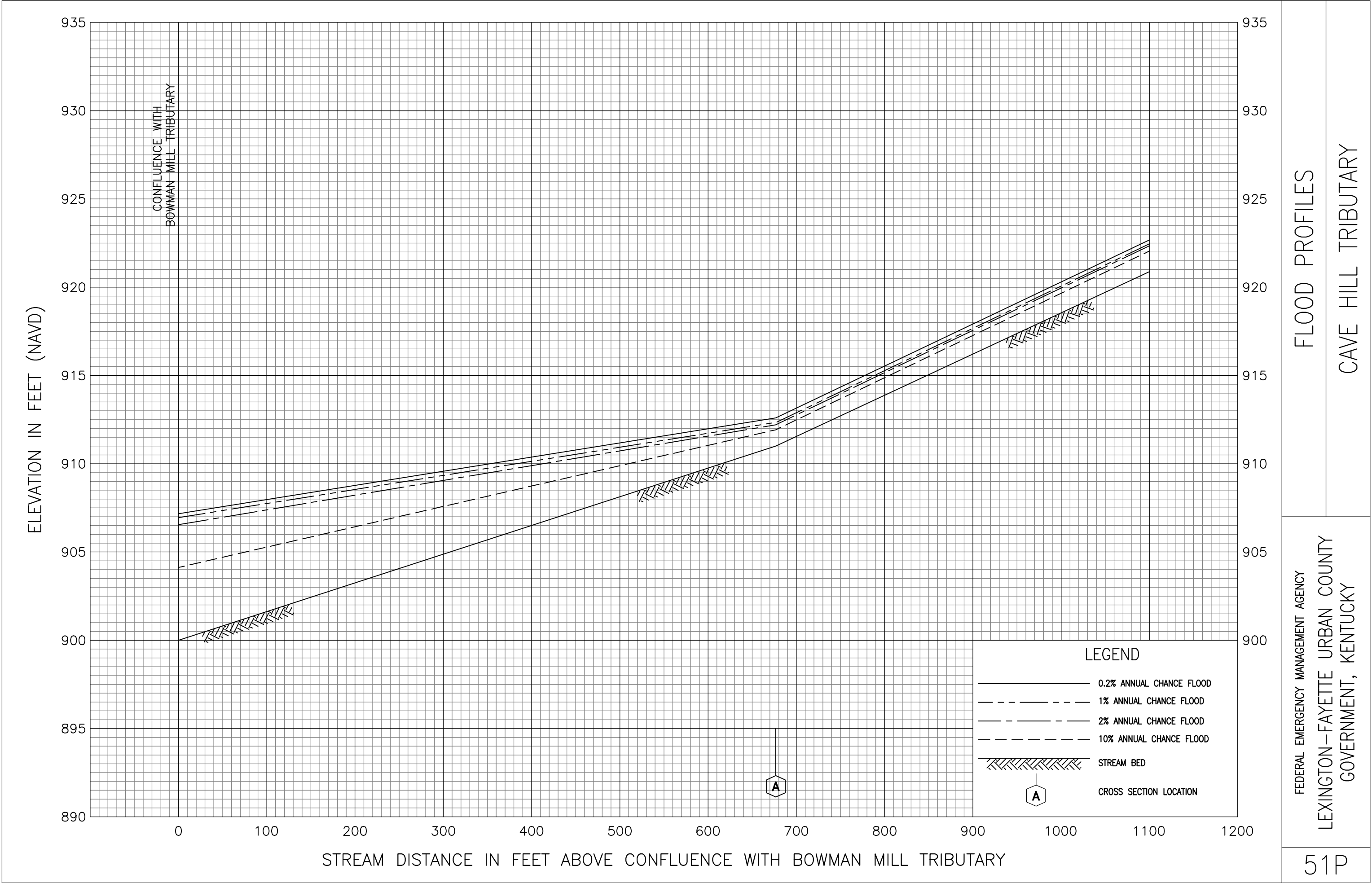
FEDERAL EMERGENCY MANAGEMENT AGENCY

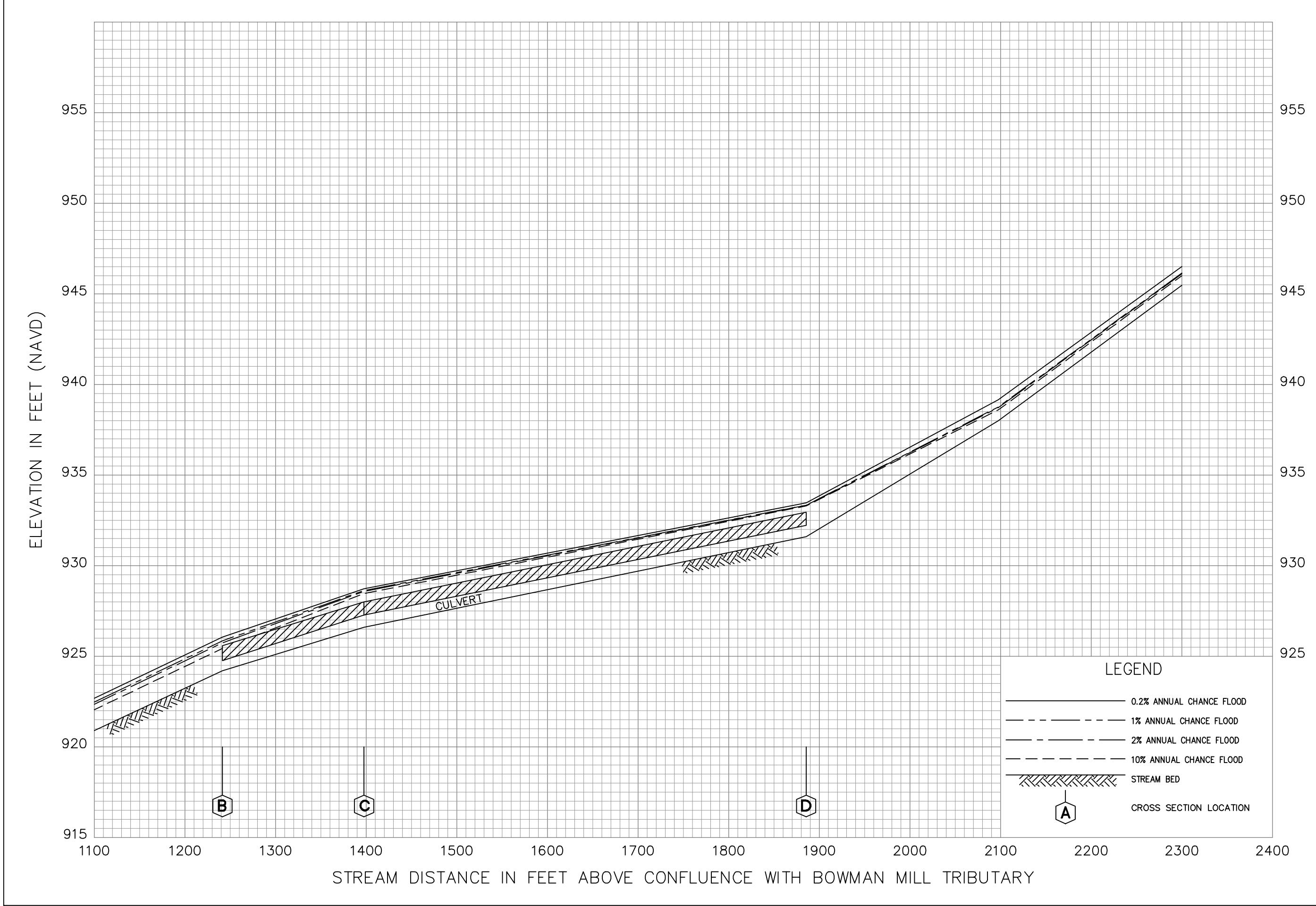
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY

FLOOD PROFILES

CAVE CREEK

50P





ELEVATION IN FEET (NAVD)

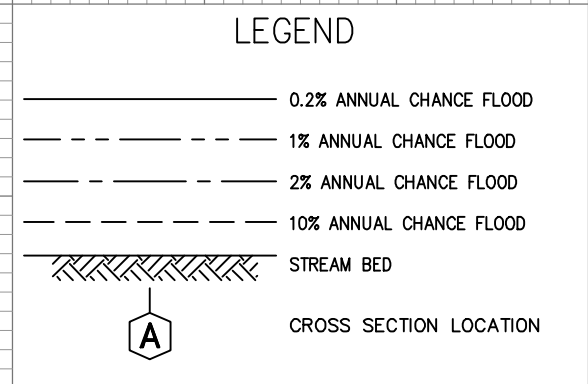
980
975
970
965
960
955
950
945
940

2300 2400 2500 2600 2700 2800 2900 3000

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH BOWMAN MILL TRIBUTARY

FIELD CROSSING

LIMIT OF DETAILED STUDY

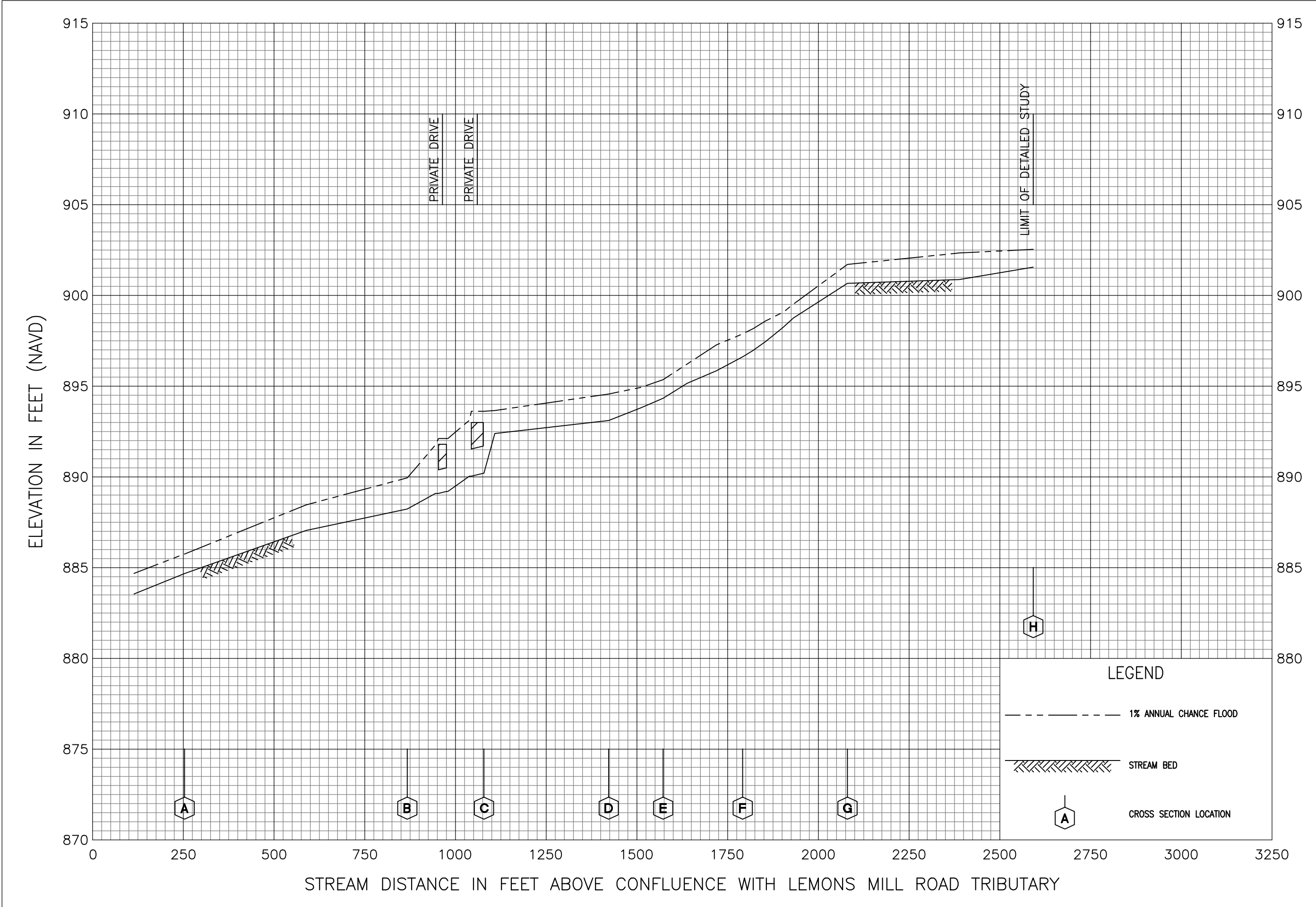


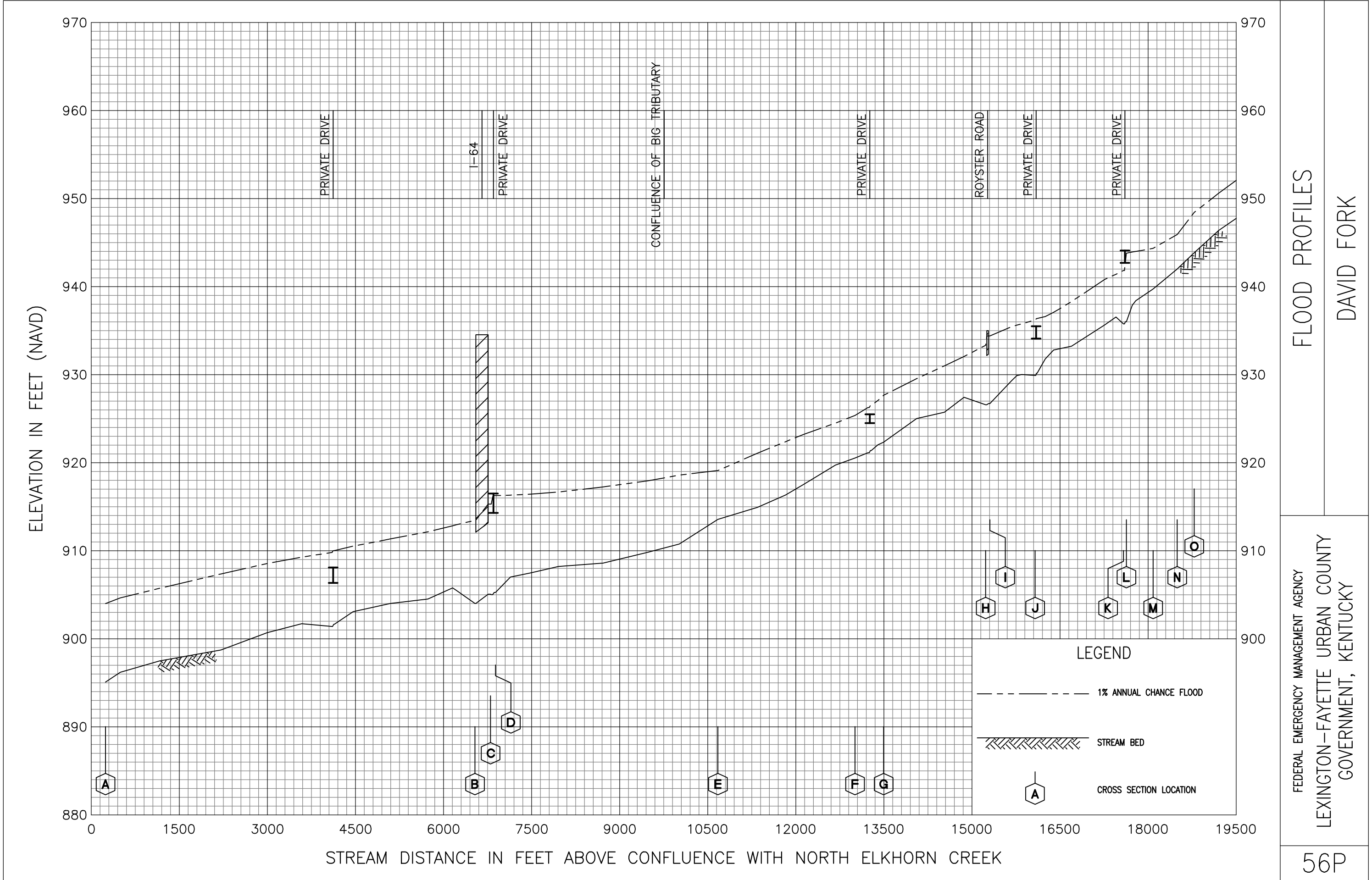
FLOOD PROFILES

CAVE HILL TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON—FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY

53P

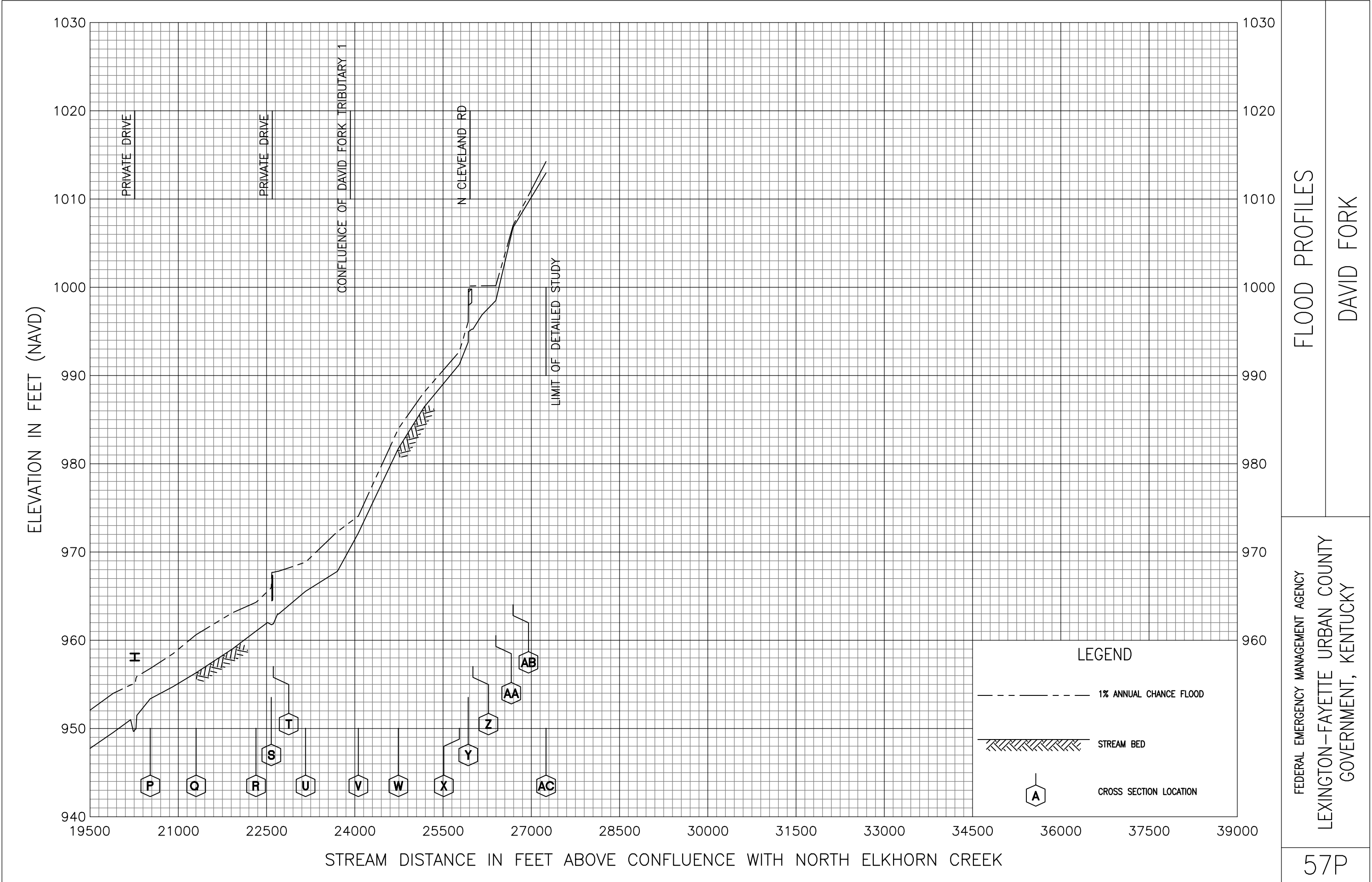


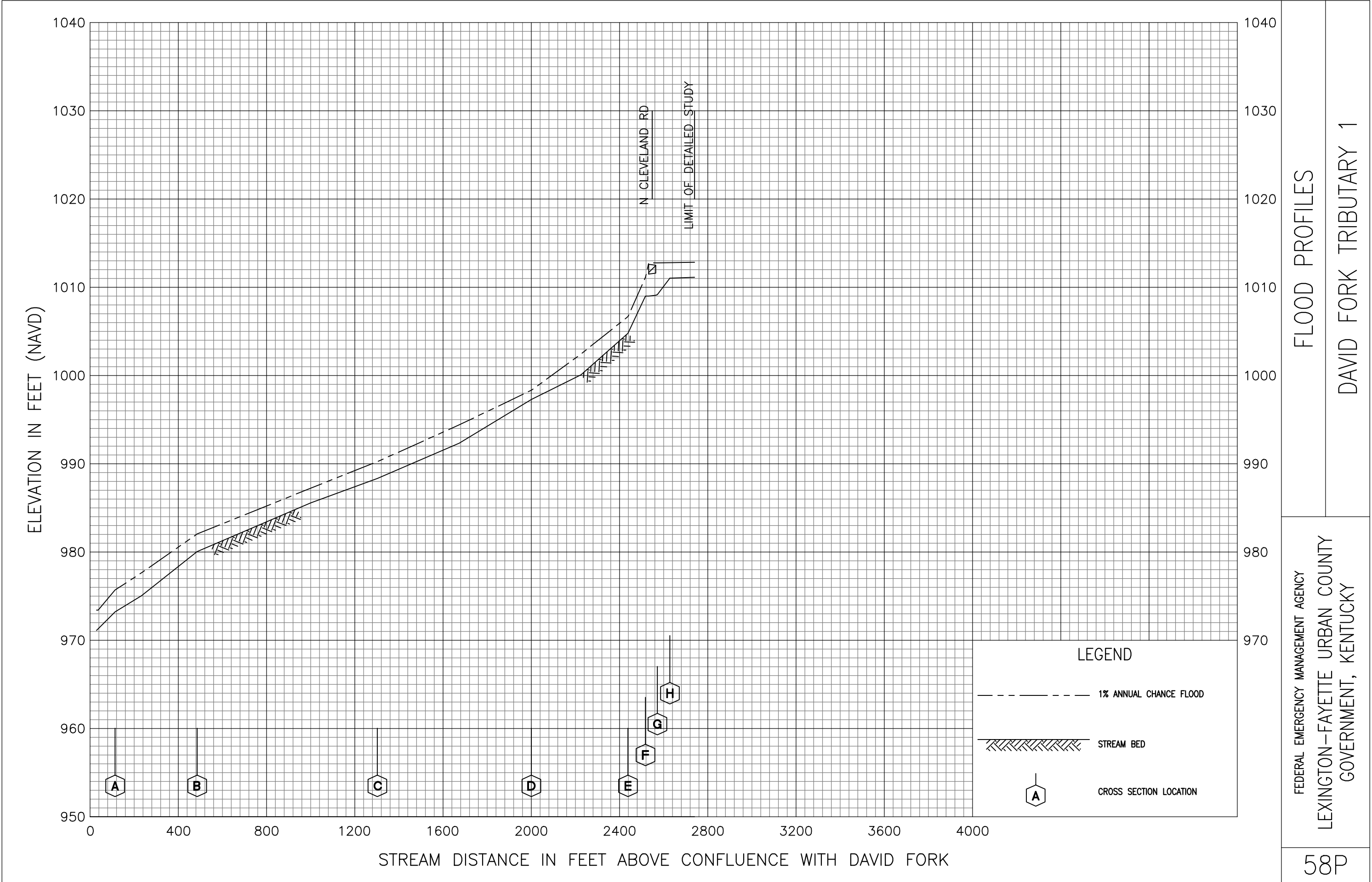


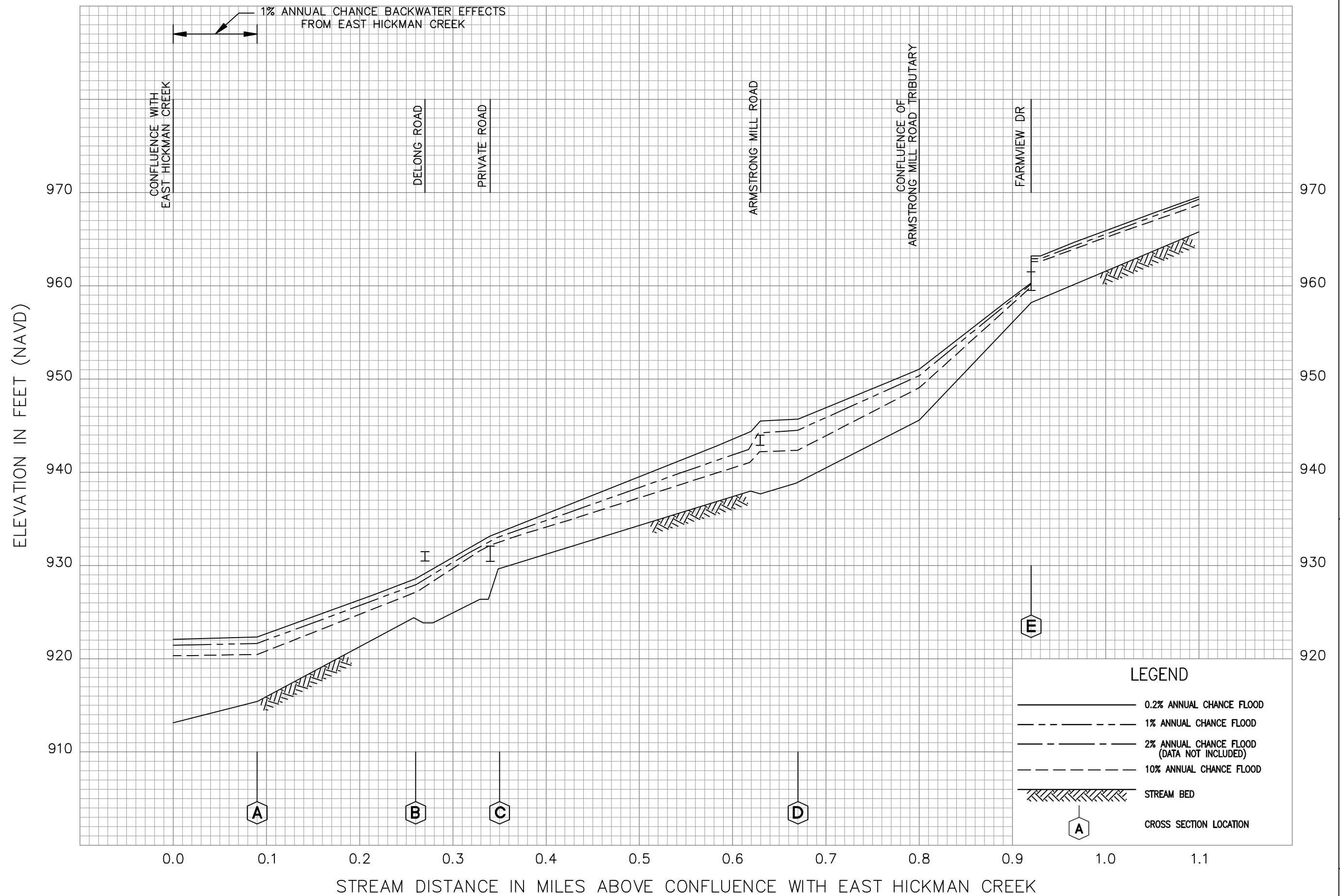
FLOOD PROFILES

DAVID FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY

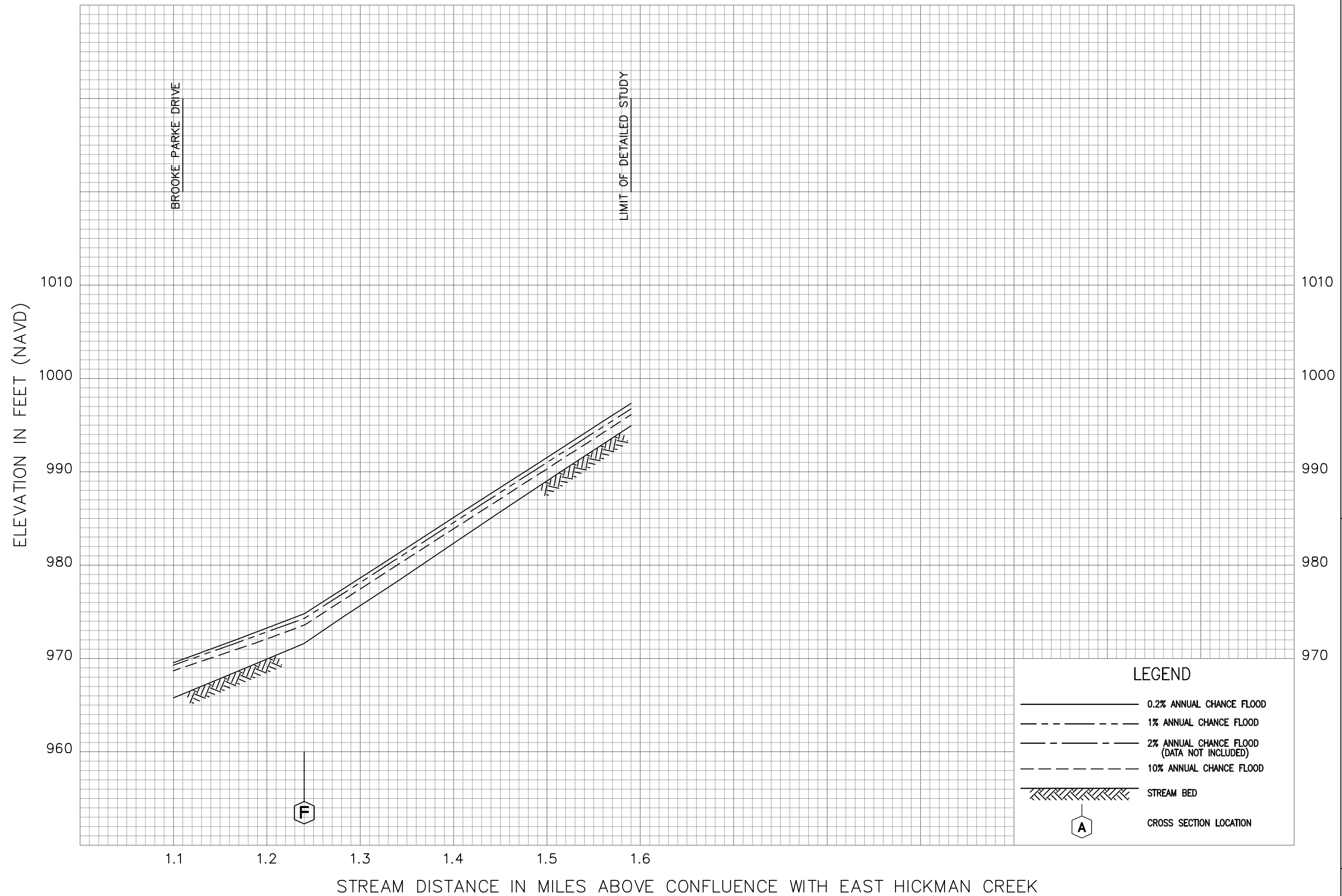


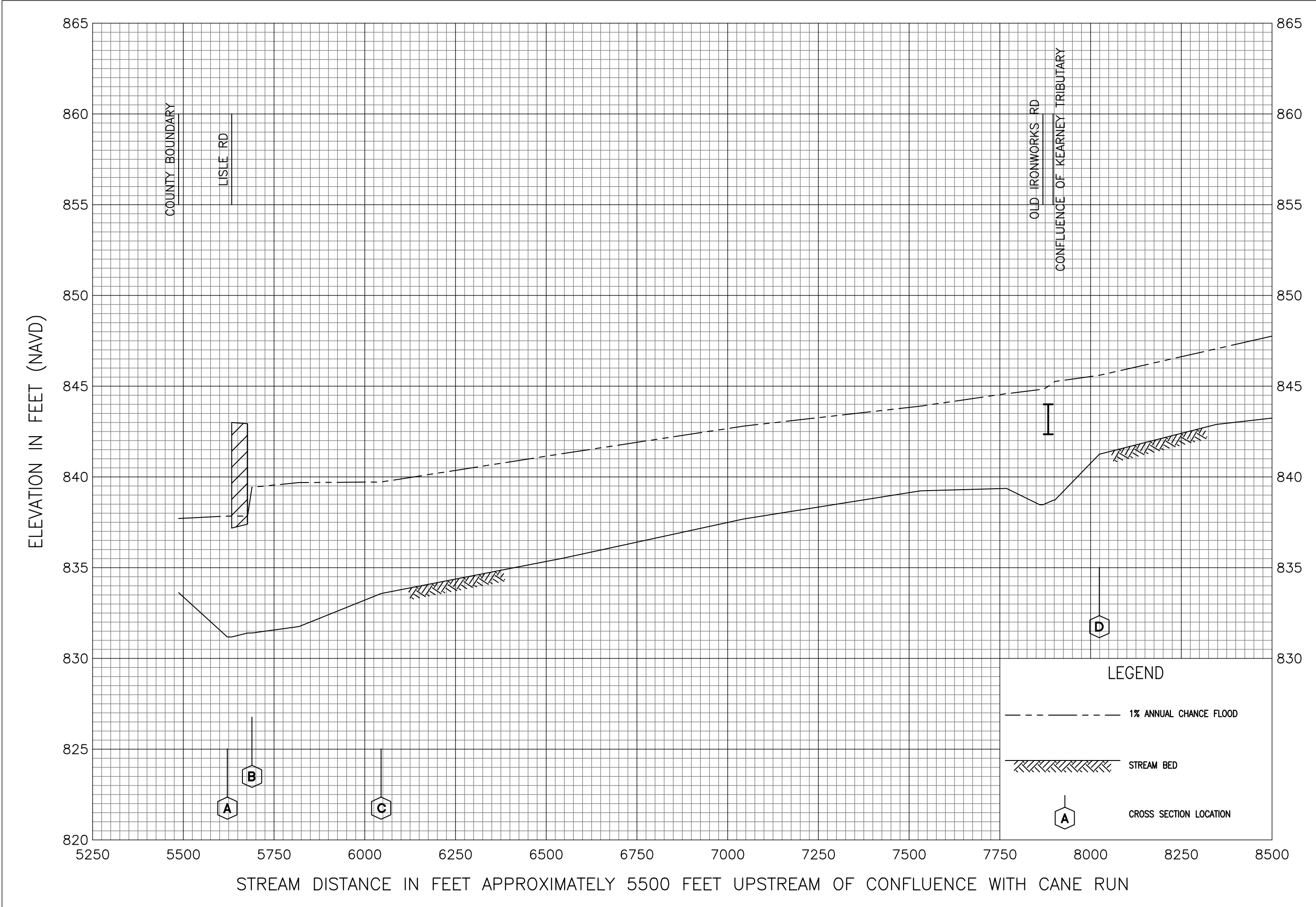


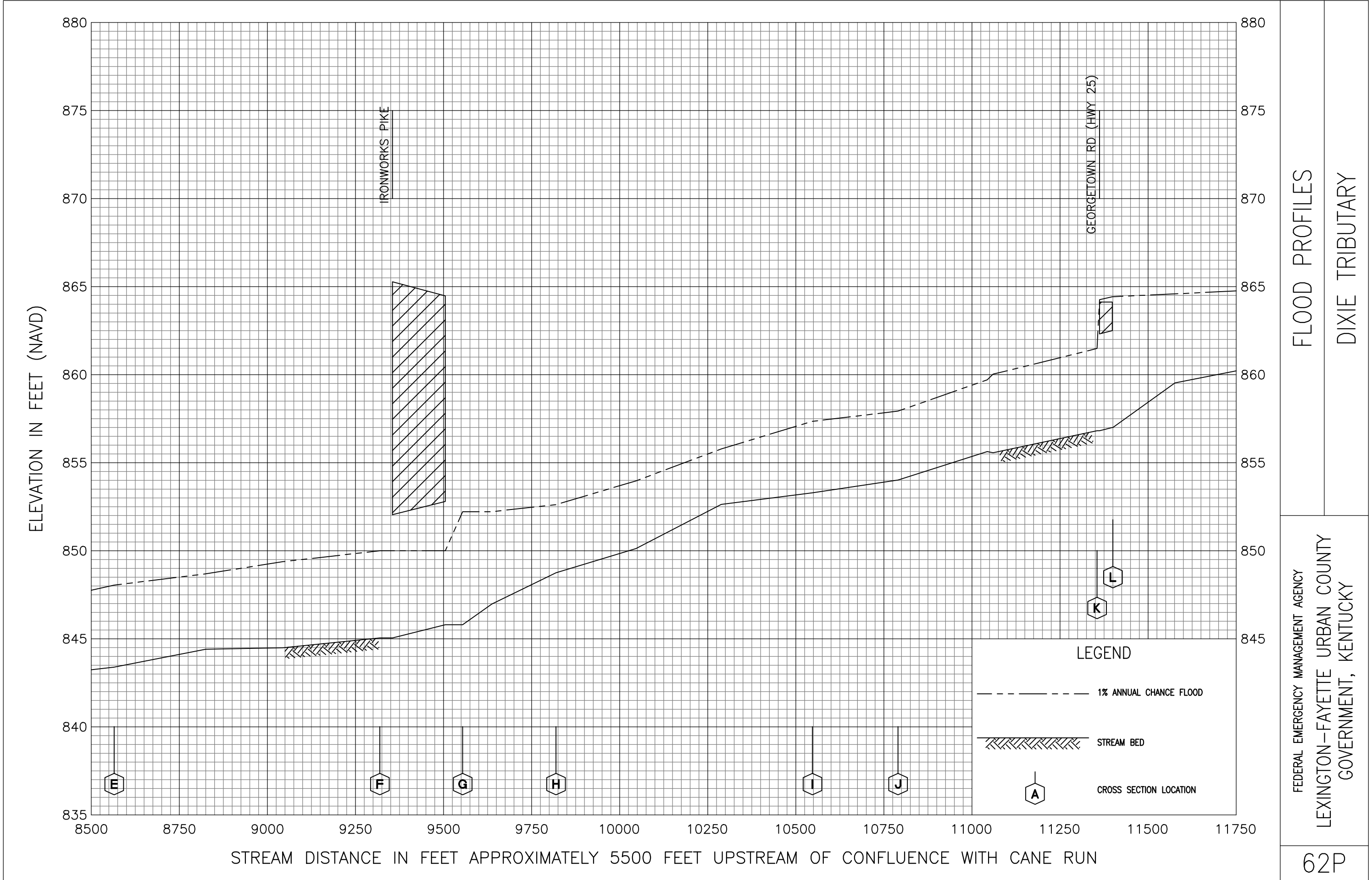


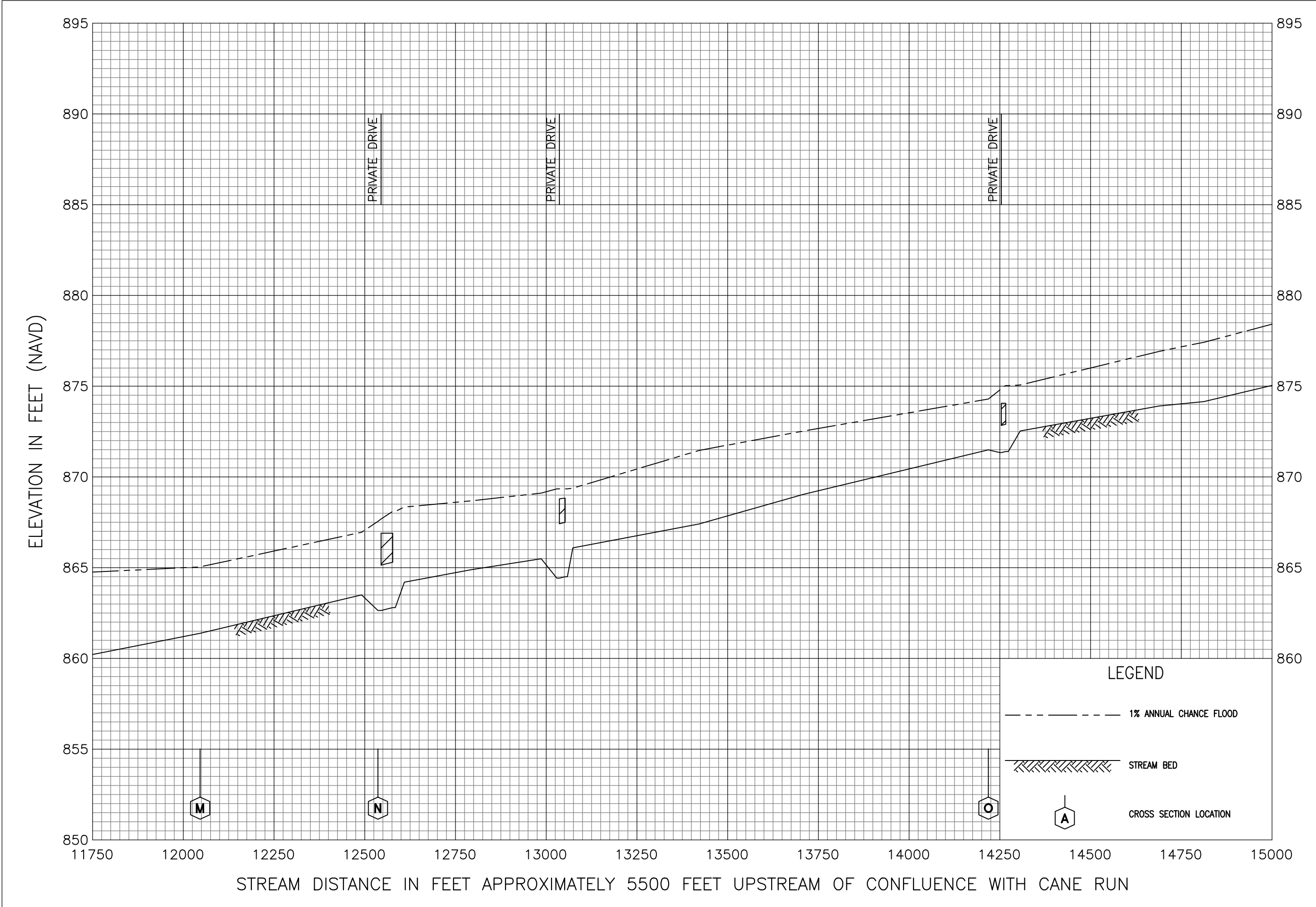
FLOOD PROFILES DELONG ROAD TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON – FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY





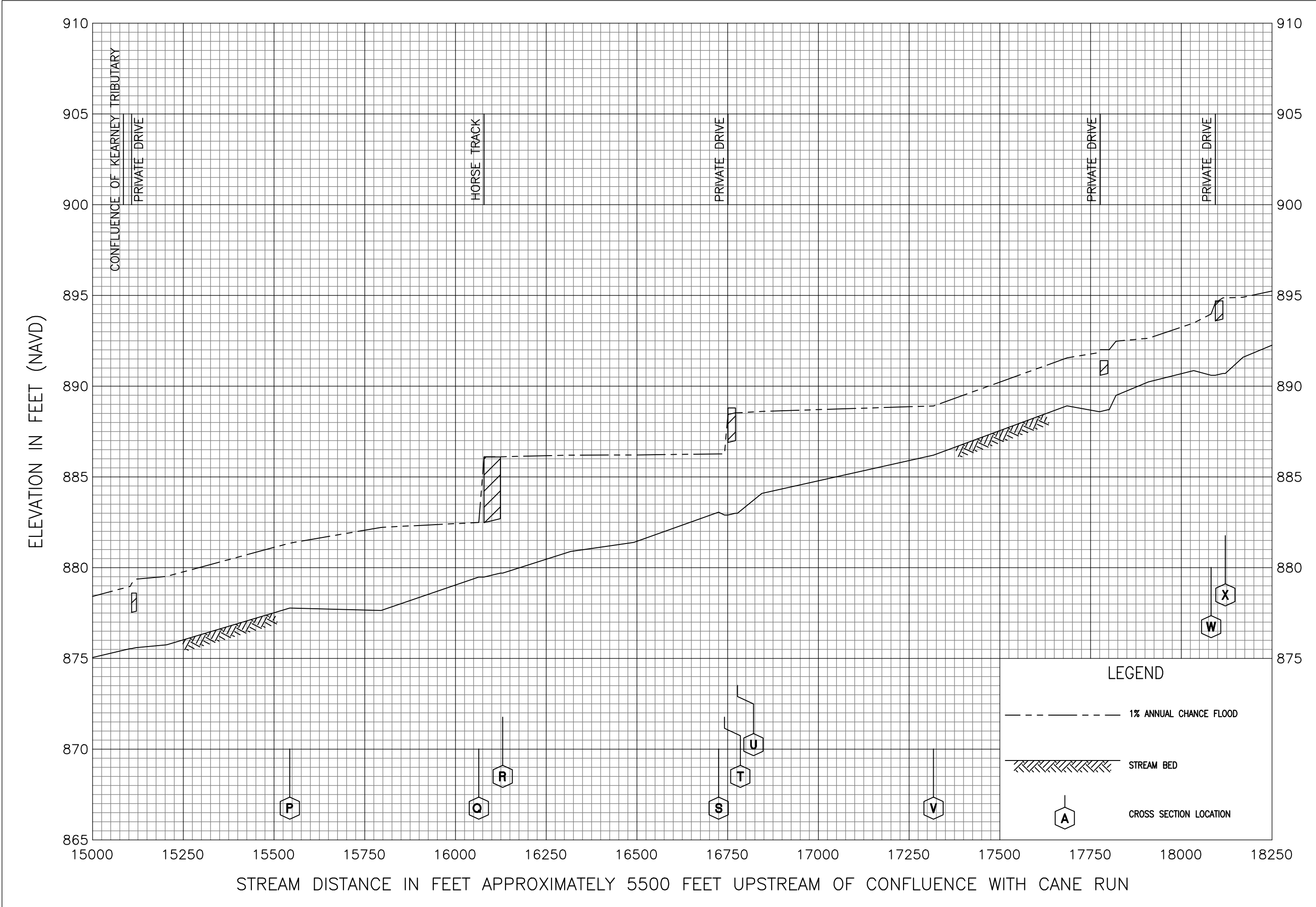




FLOOD PROFILES

DIXIE TRIBUTARY

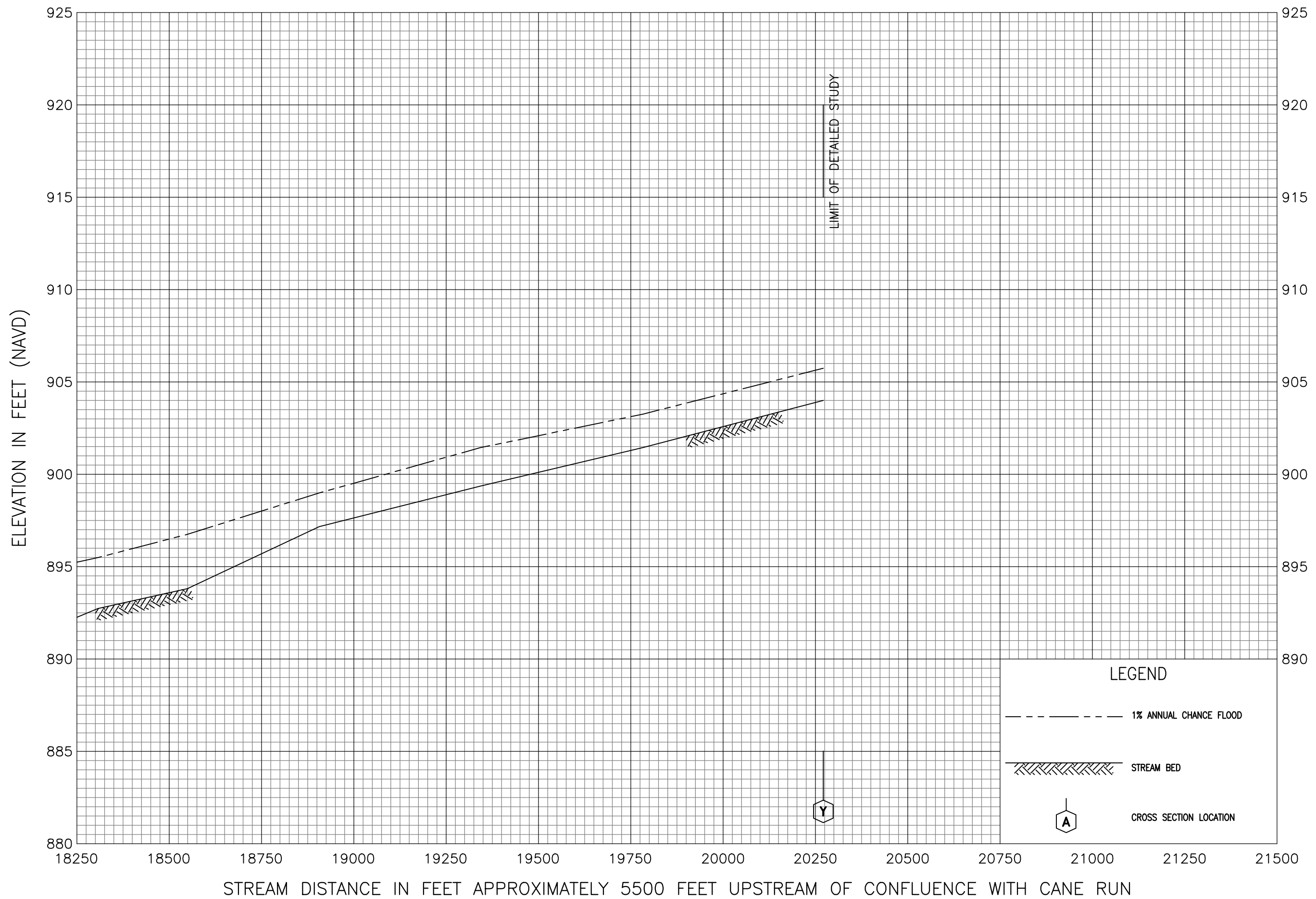
FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY



FLOOD PROFILES

DIXIE TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY

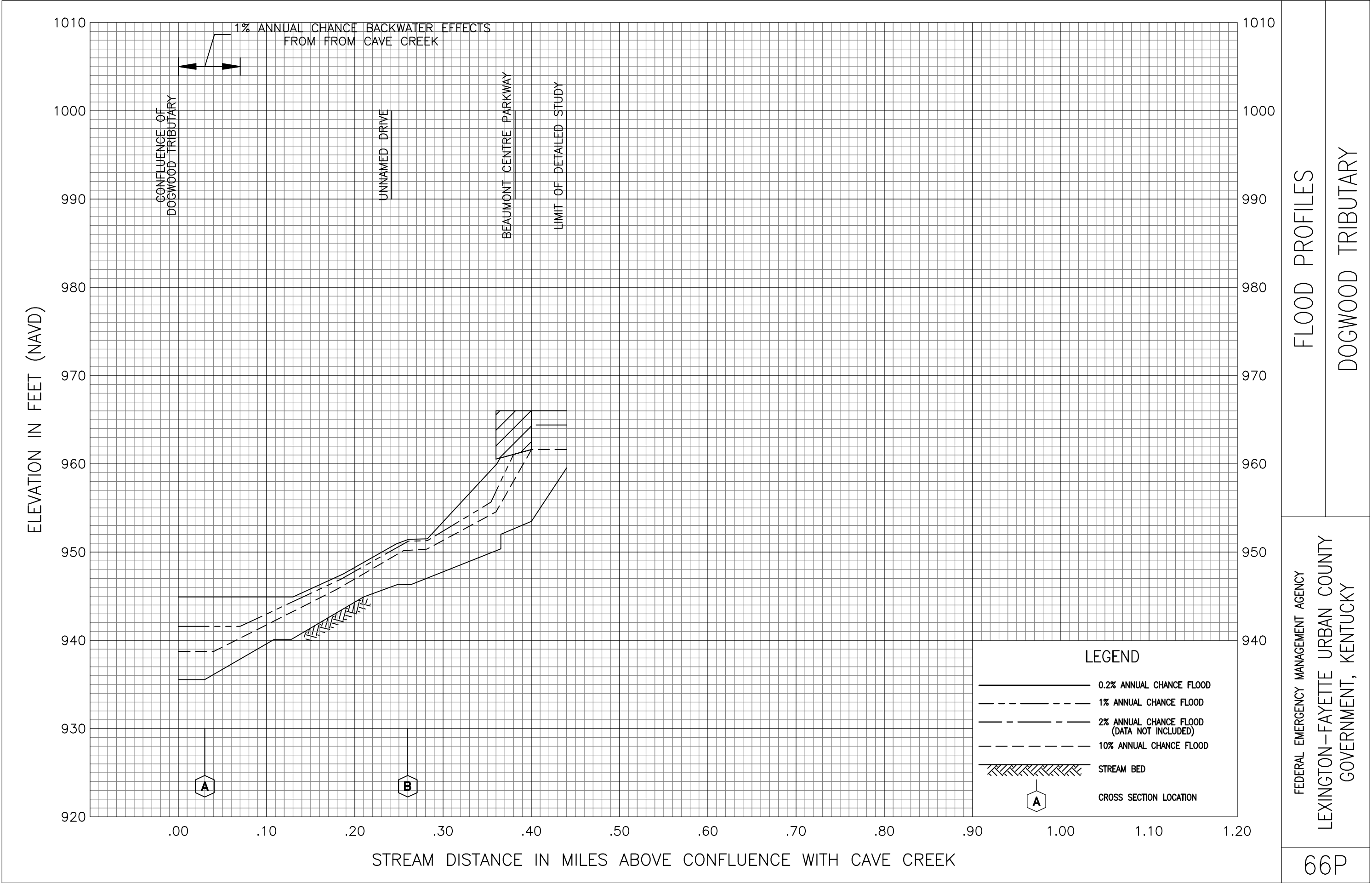


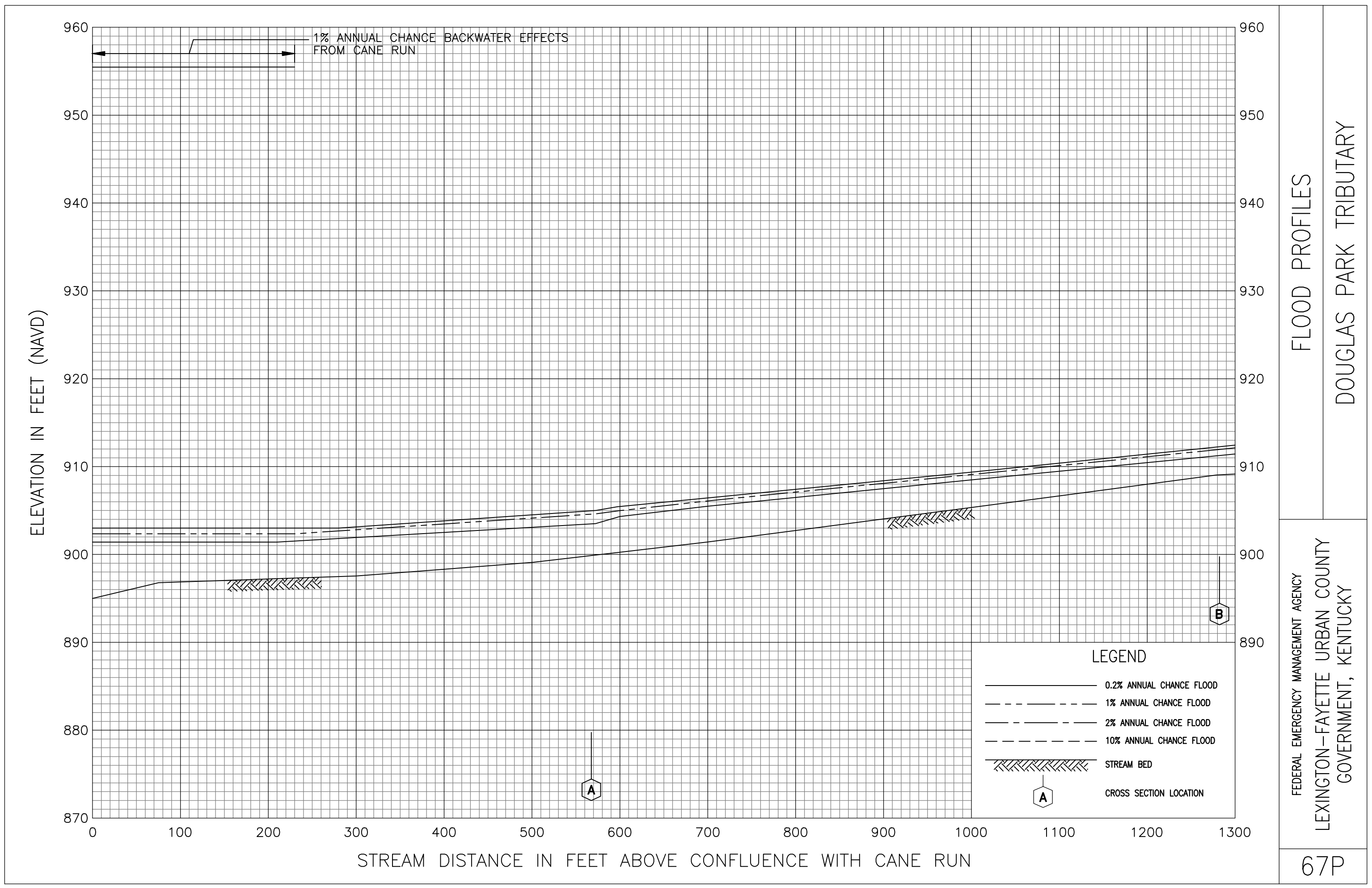
FLOOD PROFILES

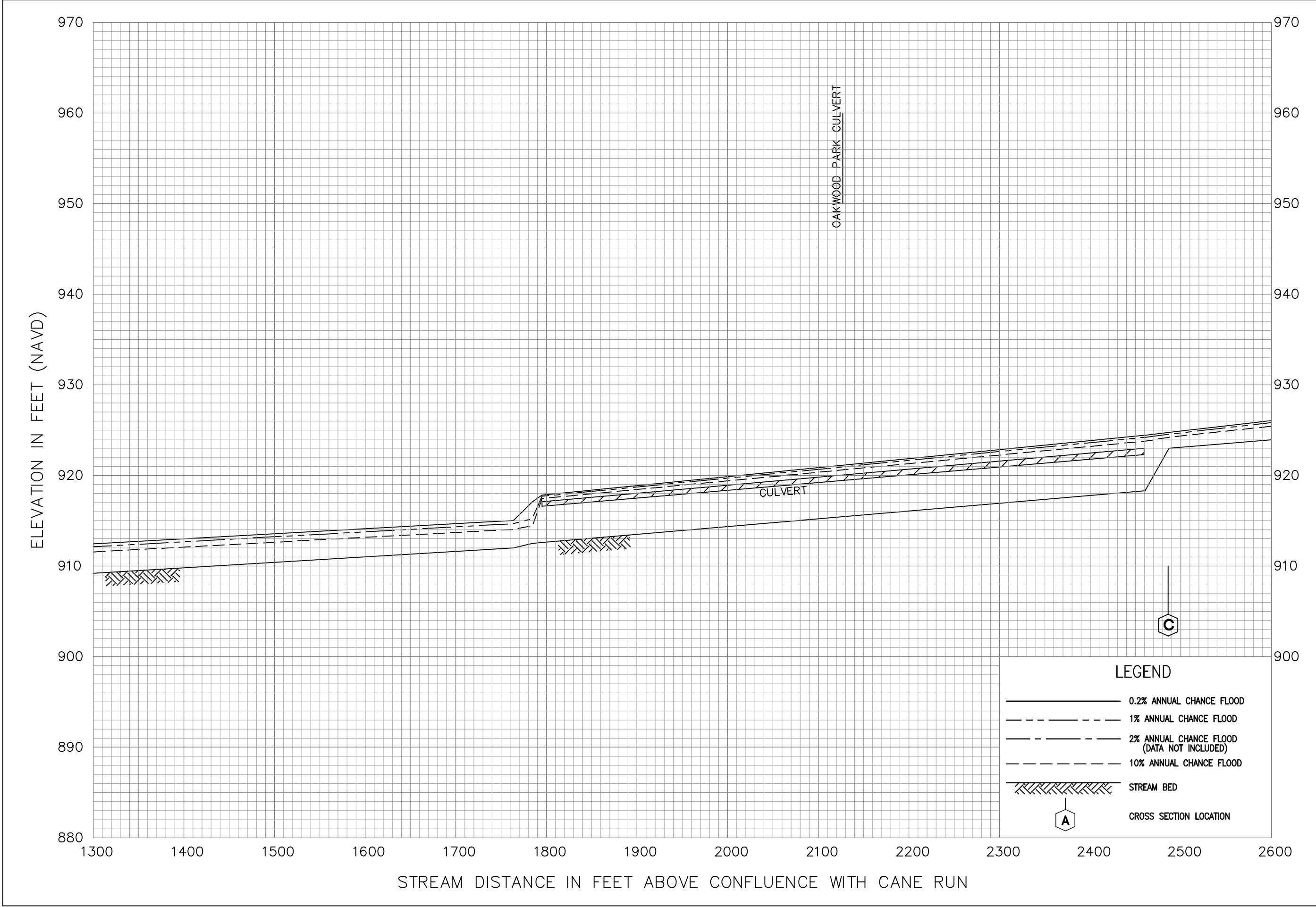
DIXIE TRIBUNARY

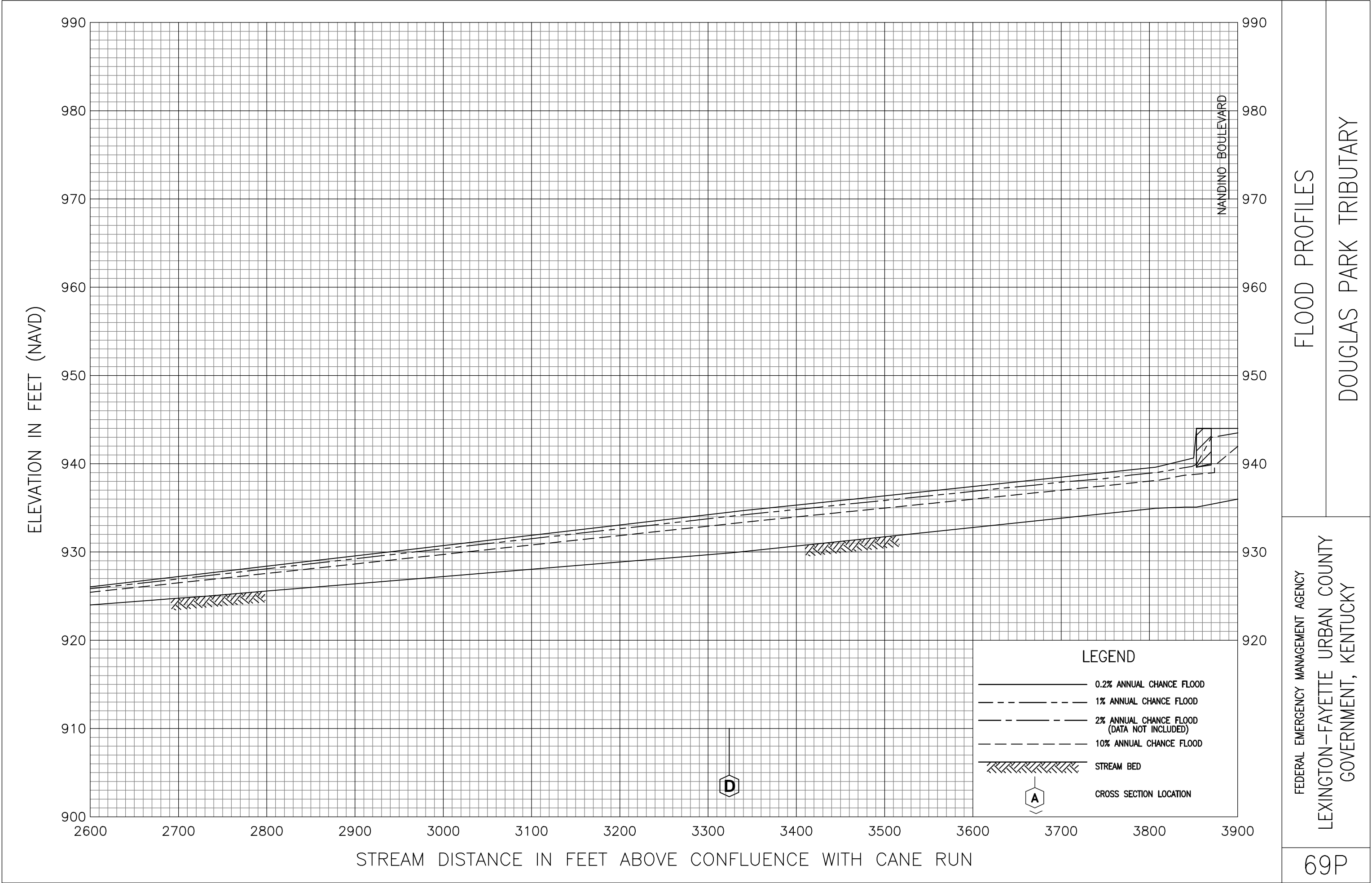
FEDERAL EMERGENCY MANAGEMENT AGENCY
LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT, KENTUCKY

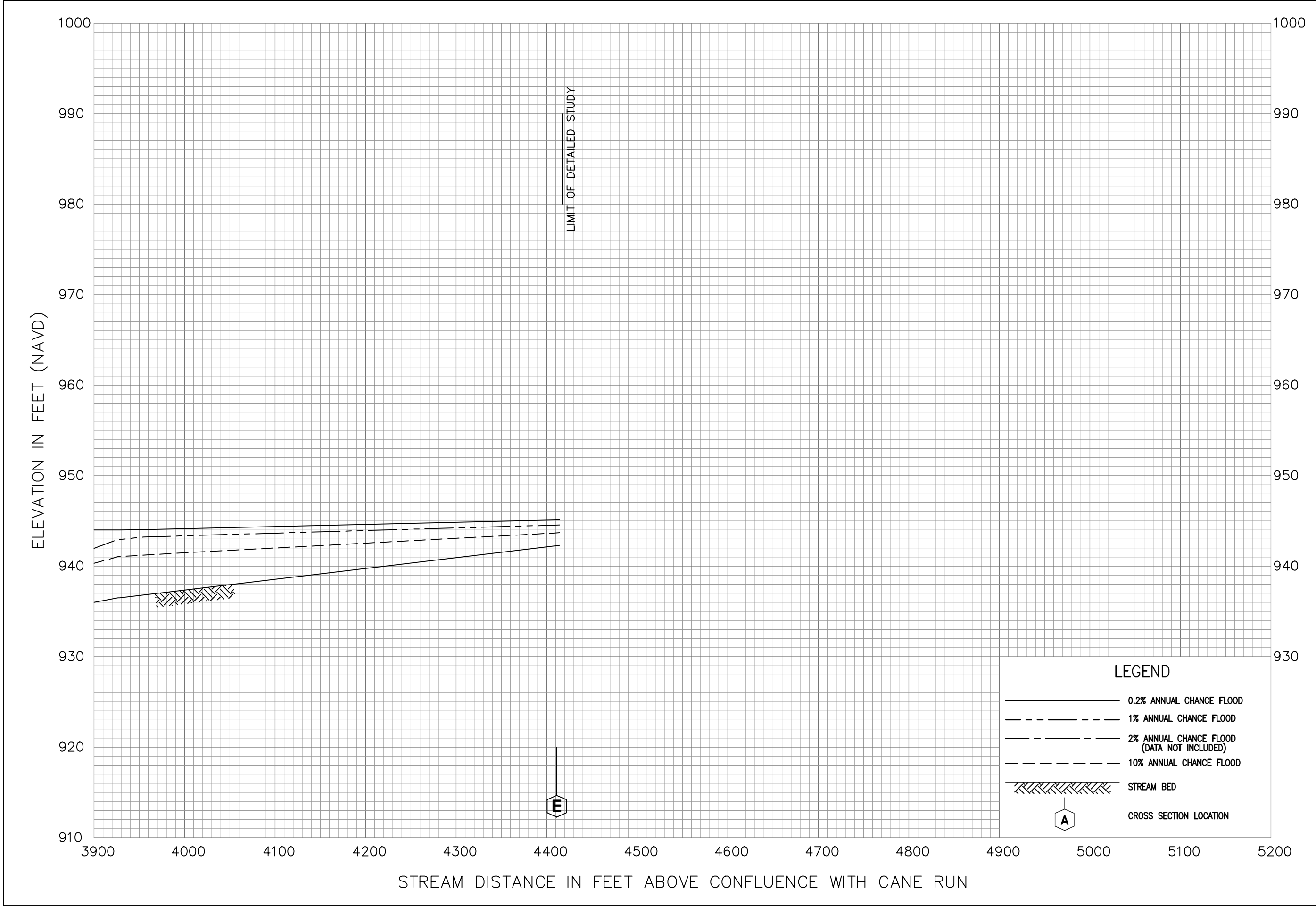
65P

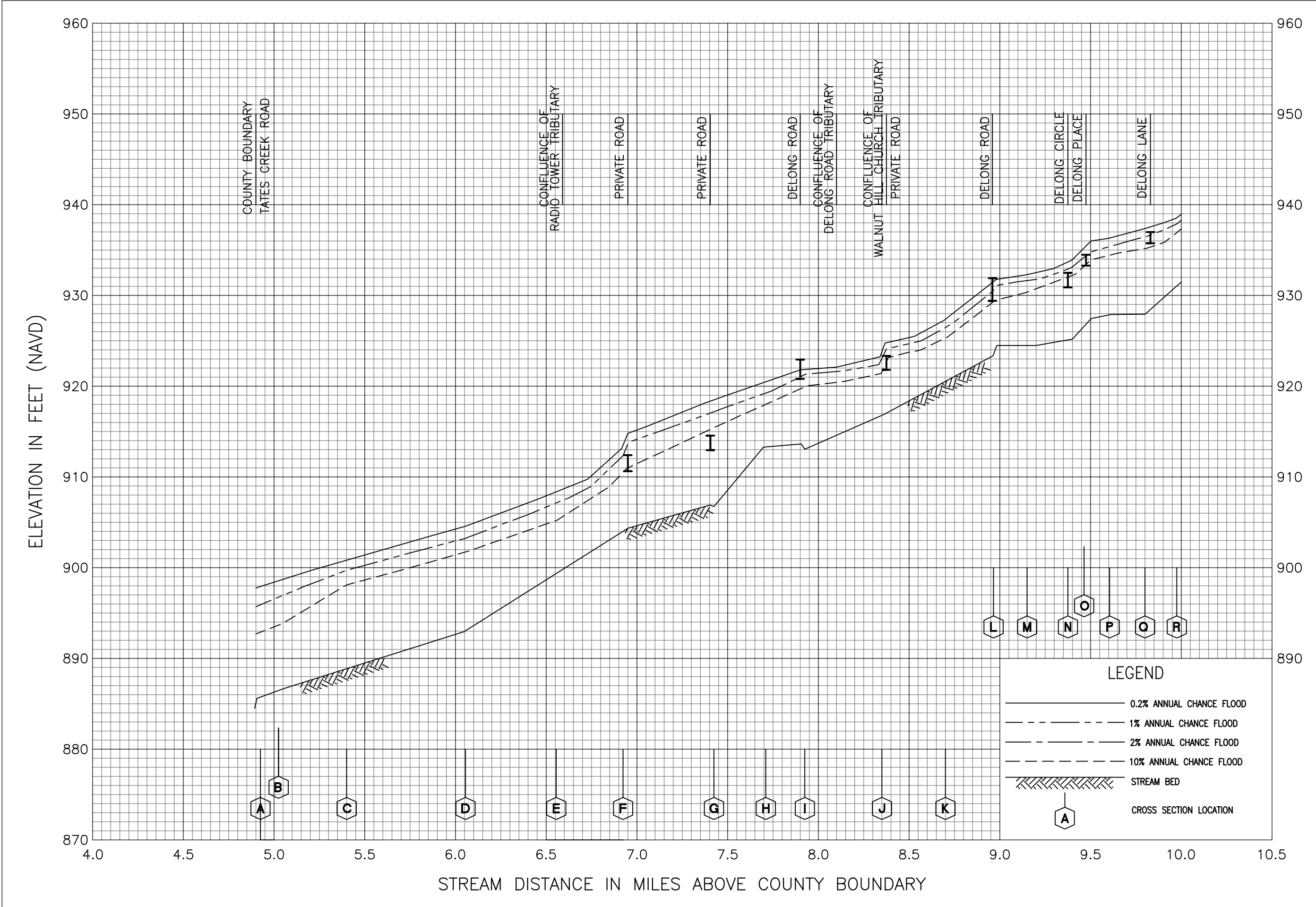




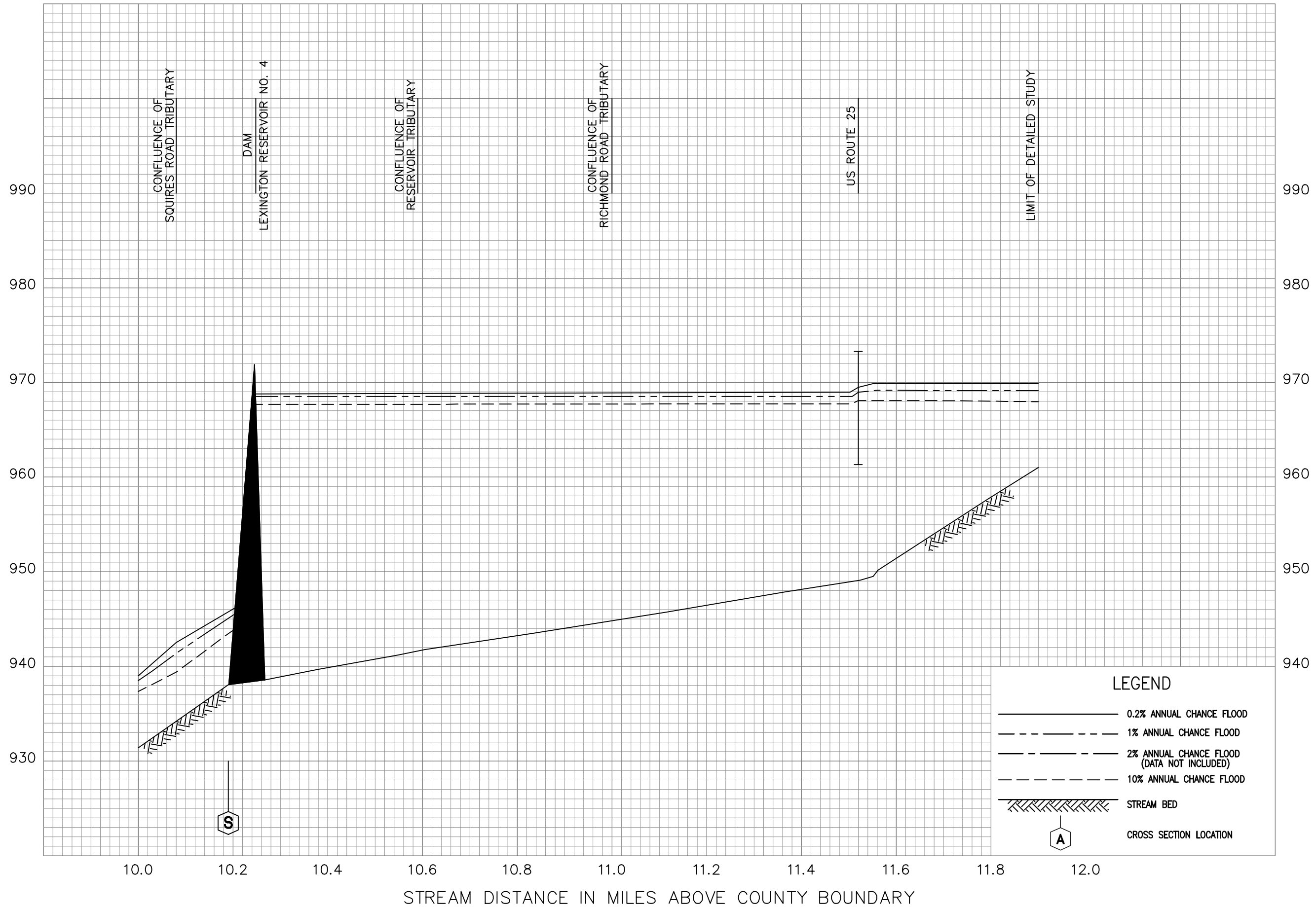








ELEVATION IN FEET (NAVD)



ELEVATION IN FEET (NAVD)

